# APPENDIX 4

## 1.0 CLINICAL OUTPUT SPECIFICATIONS (GENERAL)

### 1.1 Introduction

1.1.1 Clinical Output Specifications have been developed by four sub-groups:

- Outpatient/Day Services
- Intrapartum Services
- In-Patient Services
- Neonatal Services

1.1.2 In developing the specifications sub-group co-chairs consulted widely with clinical and non clinical colleagues. Specialist needs are elaborated upon in the individual sections and where necessary, room and service descriptions are highlighted.

1.1.3 The relocation of maternity services to the Crosshouse site creates opportunities for service development and delivery. Subgroups have commented on the potential impact of a change of site on service provision, these include:

- An opportunity to radically rethink the service provided and the way in which it is delivered from the perspective of maternity service users
- Improved access to adult ITU and other specialist clinical services
- More secure facilities for women and babies
- Closer availability of laboratory services including provision of blood
- Improved opportunity for collaborative working with other professional colleagues on the Crosshouse site
- Improved IT infrastructure
- Centralisation of equipment
- Opportunity for more flexible staff working arrangements
- Improved access to and, availability of senior medical staff during “working” hours
- Development of a purpose-built accommodation which integrates with existing Crosshouse services

1.1.4 A Clinical Adjacency Matrix has been developed with service users (Appendix 7). More detailed adjacency information is elaborated upon within specifications where this requires particular emphasis.

## OUT-PATIENT/DAY SERVICES

Out Patient/Day Services comprise four different service elements:

- Antenatal Out-Patient services (Antenatal clinics and Antenatal assessment)
- Early Pregnancy Assessment Suite
- Termination of Pregnancy Unit (TOP)
- Ultrasound Scanning (Diagnostics)

## 2.0 ANTENATAL OUT-PATIENT SERVICES

### 2.1 Outline of Service

2.1.1 Currently antenatal services are fragmented; they are delivered within two separate areas of Ayrshire Central Hospital. Through redesign, the antenatal journey shall be significantly more woman focused.

2.1.2 Women attend antenatal clinics to be screened for obstetric problems developing in pregnancy. Once problems have been identified the Antenatal Assessment Suite provides a facility in which those problems can be studied further and resolved.

2.1.3 The antenatal clinic serves the population predominantly from the Irvine area whilst the Antenatal Assessment Suite serves an Ayrshire wide population. Women living in South and East Ayrshire have antenatal care delivered through local community clinics with referral to the Antenatal Assessment Suite when necessary.

### 2.2 Current Service Configuration

2.2.1 *Antenatal Clinic*

- Reception Desk
- Waiting Area
- 4 Consulting /Examination rooms
- One interview Room
- General Office
- Midwife's Office
- Preparation for Parenthood Room
- Preparation for Parenthood Store
- Preparation room
- Clean utility
- Dirty Utility
- Cleaner
- 4 patient toilets
- One staff toilet
- Specimen Toilet
- Equipment store
- Linen Store

2.2.2 *Antenatal Assessment Suite*

- Reception / General Office
- Consultation / examination Area. Open plan – two beds
- Monitoring / Sitting area with Pantry
- Equipment Store
- Clean & Dirty Utility Rooms
- WC

## 2.3 Activity

2.3.1 *Gynaecology Clinics*

Three consultant led gynaecology clinics are held at the antenatal clinic facility in Irvine. No gynaecology services will be provided within the new maternity unit, these clinics do not therefore require further consideration.

2.3.2 *Antenatal Clinics*

The following table identifies attendances at antenatal clinics across Ayrshire during 2002.

| District | Attendances | No of clinics |
|---|---|---|
| **Irvine** | **967** | **3** |
| **Ayr** | **816** | **2** |
| **Cumnock** | **277** | **1** |
| **Saltcoats** | **491** | **1** |
| **Kilmarnock** | **777** | **2** |
| Total | 3328 | 9 |

2.3.3 Factors affecting choice of clinic attended are complex but may include a view that Ayrshire Central Hospital is the base maternity hospital and antenatal care may be best provided from this location. Two female consultants are based in Irvine and women seeking a female consultant may be prepared to travel to Irvine for antenatal care.

2.3.4 *Antenatal Assessment Suite*

2585 attendances were recorded at the Antenatal Assessment Suite in 2001. The major reasons for assessment were:

| Reason For Assessment | Activity (2001) |
|---|---|
| **Hypertension** | **643** |
| **Other medical problems** | **93** |
| **Post term & term assessment** | **635** |
| **Diabetes/Gestational Diabetes/GTT** | **201** |
| **Suspected growth restriction** | **189** |
| **Diminished fetal movement** | **173** |
| **Multiple pregnancy** | **148** |
| **Poor obstetric history** | **112** |
| **Other** | **391** |
| Total | 2585 |

## 2.4 Service Trends

2.4.1 *Antenatal Clinics*

Antenatal clinics based at the new maternity hospital will be different from current services:

2.4.1.1 Antenatal clinics in the new hospital will offer a consultant based antenatal care model for women with problems that live in or around Kilmarnock (post codes KA1, KA2, KA3, KA4, KA16, KA17) see appendix 8. Clinics will be held twice per week staffed by two consultant teams.

2.4.1.2 Women attending will be those with defined problems which may impact on their pregnancy and represent approximately 30 - 40% of the total of women within the post codes identified above i.e. some 250 – 300 women.

2.4.1.3 Women with problems relating to their pregnancy will need to be more intensively studied and their model of care will be closer to that of women attending the current antenatal assessment suite.

2.4.1.4 It is proposed to drop the term antenatal clinic and use the term antenatal assessment for women who need a consultant led model of antenatal care.

2.4.1.5 The remaining 60 – 70% of women living in the Kilmarnock area with normal pregnancies will be cared for by a community led team with antenatal care delivered in a community clinic at Old Irvine Road, Kilmarnock. Antenatal care will continue from other community based clinics as at present. A community based clinic will remain at Irvine.

2.4.1.6 There may be subtle changes in referral pattern following the relocation of the maternity unit on the Crosshouse site. Women from Troon (equidistant from Irvine, Kilmarnock and Ayr) may tend to go south to Ayr or East to Kilmarnock for their antenatal care as Irvine is no longer the locus of the base hospital. Women living in Mauchline KA6 (equidistant from Cumnock and Kilmarnock) may tend to go north towards Kilmarnock as this will now be the base maternity hospital.

2.4.1.7 In the future it is likely that antenatal clinics will develop which are problem based e.g. diabetes. Similar models may develop for other maternal conditions such as epilepsy, asthma and women who have a thrombophillic tendency. Women with antenatal and postnatal psychiatric problems may justify a clinic catering for their needs.

2.4.1.8 Antenatal clinics may develop to cater for social as well as medical conditions including substance abuse and domestic violence. These may not be 'conventional' clinics but be bases to access all the necessary support agencies from midwives, general practitioners and specialists.

2.4.1.9 Preconception clinics will develop for women with past obstetric problems or medical conditions which will have an impact on their pregnancy.

2.4.2 *Antenatal Assessment Suite*

2.4.2.1 Following relocation, the antenatal assessment suite will continue as at present.

**2.5 Service Philosophy/Concept**

2.5.1 NHS strategy is directed towards delivering more care in local communities. Antenatal services are therefore developing community based antenatal care services wherever possible in partnership with community colleagues.

2.5.2 Maternity Unit services will allow extensive investigation of problems developing in pregnancy so that women are not separated from her families unnecessarily and admission to hospital is for a specific purpose rather than the age-old panacea of 'rest'.

**2.6 Functional Content**

2.6.1 The following shall be considered in design development:

- The antenatal assessment unit could be located at first floor level

- A large open plan airy general waiting area shall be provided which has a pleasant view of the outside environment
- Refreshments shall be available for those attending
- The Ultrasound Department will be an integral part of the antenatal assessment unit with a separate scan reception
- The antenatal assessment suite (as currently exists) shall be part of the new unit with a large lounge where women can be monitored in reclining chairs. Refreshment (self-serve) shall be available. There shall be two consulting rooms for care planning and general discussion and examination of the woman in private. The reception/nursing station will oversee the functions of the antenatal assessment suite as well as a sub-waiting area with children's play corner
- Two further clinic rooms shall be available so that they can be aligned with the consulting rooms of the antenatal assessment suite to provide a suite of four consulting rooms which can be used for a consultant led clinic. These clinics may involve consultants from other specialties and their support staff e.g. the diabetic clinic with consultant physician, diabetic liaison sister, a consultant obstetrician and supporting junior staff
- A breast feeding and parent craft facility shall be available to provide a single large area for parent craft meetings which can be subdivided for smaller group meetings necessary for breast feeding support.
- A physiotherapy treatment room for antenatal patients is required

2.6.2 Outline schedules of accommodation are provided at appendix 6.

**2.7 Key Departmental Relationships**

The bidder shall design this part of the facilities so that the following relationships are met:

2.7.1 Easy access to the wards would be advantageous

2.7.2 A departmental relationship diagram is provided at Appendix 9.

## 3.0 EARLY PREGNANCY ASSESSMENT SUITE (EPAS)

### 3.1 Outline Of Services

3.1.1 Ayrshire developed the first EPAS service in Scotland and provided the blue-print for similar units (The management of early pregnancy loss HMSO, 1996). There is a drive nationally to provide the majority of early pregnancy care through early pregnancy assessment units.

3.1.2 EPAS provides a diagnostic and therapeutic service for women experiencing pain and bleeding in early pregnancy. This service is designed as a 'one stop' approach.

3.1.3 In 2000, 1405 women attended the unit. Since ultrasound diagnosis is often not clear at first visit another appointment may be needed. In total, there were 2135 visits to EPAS in 2000.

3.1.4 The trend in activity suggests an annual increase of 10 – 20%, this is unsustainable. The new Unit shall aim to cater for 2000 visits per year. A review of admission policies/entry criteria is currently under way.

3.1.5 Specialist functions undertaken within the unit include:

- Diagnostic Ultrasound
- Counselling and links to support agencies
- Pre-operative care for women undergoing evacuation of the uterus
- Post-operative care for women undergoing evacuation of the uterus
- Support for women undergoing medical evacuation of the uterus

### 3.2 Current Service Configuration

3.2.1 The current service is provided within the following accommodation:

- Three Day Beds (one single room, one double room)
- Ultrasound examination room
- Nursing Station / Reception
- Waiting Room
- Three counselling rooms
- Two consultation rooms
- Toilets/ showers
- Dirty Utility
- Close proximity to operating theatre
- 'Separation' from the rest of the maternity unit
- Alongside 10 inpatient early pregnancy beds

### 3.3 Activity

3.3.1 *EPAS Audit 2000 Data*

| Activity in EPAS | Attendances |
|---|---|
| Ultrasound Examinations | 2135 |
| Pregnancies | 1405 |
| Continuing Pregnancies (60.1%) | 844 |
| Non Continuing pregnancies requiring evacuation of uterus | 206 |
| Non-continuing pregnancies not requiring evacuation | 219 |

3.3.2 *Ward 4 Activity*

| Ward 4 Activity | Attendances |
|---|---|
| Non-continuing pregnancies with evacuation | 146 |
| Non-continuing pregnancies without evacuation | 48 |
| Ectopic pregnancies | 27 |

3.3.3 The new configuration shall endeavour to provide 90% of all early pregnancy care within EPAS.

**3.4 Staffing**

3.4.1 The following information relates to EPAS staffing:

| Staff Group | WTE | Staff No. |
|---|---|---|
| | Current | Current |
| Midwives/Auxiliaries | 18 | 24 |

**3.5 Service Trends**

3.5.1 *Technology*

- Ultrasound machines will improve but are unlikely to achieve resolution at a level that can view structures less than 2mm in diameter (i.e. a fetus at 35 days of pregnancy)
- Urinary pregnancy tests are now positive 9 days after conception (day 23)
- There will remain a 12 day window in which the fetus cannot be 'seen'
- Biochemical markers are likely to bridge the gap. (Serum progesterone currently under investigation within our own EPAS)
- It is likely that medical evacuation of the uterus will increase in popularity with women

3.5.2 *Links to the Community*

The diagnostic element of early pregnancy care could move to a community base as the resolution of portable ultrasound machines improves. However, the therapeutic component of the service will remain on one site in Ayrshire for the foreseeable future.

3.5.3 *Activity Level*

Activity levels appear to operate independently of birth rate. As the birth rate has fallen the number of women attending EPAS has increased; perhaps due to greater expectations by women.

**3.6 Service Philosophy/Concept**

3.6.1 The concept of EPAS is to provide care for women experiencing pain and bleeding in early pregnancy on a day case basis. That care to date has been based on a medical model. However, the vast majority of care is emotional and supportive. The opportunity to review and reshape the service offers a prospect to recognise this through improved facilities and design. Women attending theatre for an evacuation of the uterus are undergoing very minor surgery that has a high emotional impact. The vast majority of these women are young, fit and healthy and could be expected to recover from general anaesthesia and the surgery without difficulty. There is now an opportunity to "de-medicalise" the process.

3.6.2 Ayrshire has traditionally offered a holistic approach to pregnancy care starting with pre-conception care and ending in postnatal care in the community. The remit

of the maternity service includes caring for women with pain and bleeding in early pregnancy as well as women with unwanted pregnancy. All elements of early pregnancy care need the support of specially trained staff as well as rapid access to the technology that care in later pregnancy demands.

3.6.3 Women experiencing miscarriage have not traditionally been cared for well by the gynaecology service. By providing appropriate accommodation alongside maternity operating theatres better use is made of theatre resources and the experience is likely to be better for women.

3.6.4 Mixing early and late pregnancy care works well as long as potential sensitivities are recognised. Unwanted pregnancy poses problems for confidentiality regardless of where the service is sited, more so if alongside the maternity service. Women experiencing early pregnancy loss shall not be reminded of that loss by being in the proximity of crying babies or mixing with women who are clearly in the later stages of pregnancy.

## 3.7 Functional Content

3.7.1 Outline schedules of accommodation are provided at appendix 6.

3.7.2 A diagrammatic representation of the EPAS facility is to be found at appendix 10, and an illustration of a “quiet room” room layout at appendix 11.

3.7.3 *Functions of a “Quiet Room”*

- A place that a woman can go, with her partner/escort, if she has had bad news about the likely pregnancy outcome
- A calm informal non-threatening room with a non-clinical atmosphere that offers privacy
- An area where a woman and her partner can discuss the plan for her subsequent management with medical and midwifery staff
- Shall there be a requirement to attend theatre it is the base that she would leave from, and the place she would return to after immediate post-operative recovery (approximately one hour) in one of the single bedrooms
- Pre-operative priming with misoprostol would be administered in this room.
- Pre-operative assessment by anaesthetists would take place in this room
- Progressive post-operative recovery would take place here
- When a woman chooses “medical evacuation of the uterus” she would have her care delivered exclusively within this room

3.7.4 *Potential for Shared Accommodation with the Termination of Pregnancy Unit*

- Clean Utility
- Dirty Utility
- Preparation Room
- Store
- Ultrasound
- Cleaner

## 3.8 Key Departmental Relationships

The bidder shall design this part of the facilities so that the following relationships are met:

- Adjacent to TOP (shared accommodation)
- Adjacent to operating theatres
- Close access to main maternity hospital entrance
- Access to laboratory services : biochemistry and haematology

## 4.0 TERMINATION OF PREGNANCY UNIT (Currently Ward 2)

### 4.1 Outline of Services

4.1.1 The function of the unit is to provide all aspects of care for women who have an unplanned/unwanted pregnancy. In addition, the following supportive services are provided as part of the holistic approach to care delivery:

- Pre-abortion counselling
- Nurse-led Termination of Pregnancy Clinics
- Providing safe abortion care services
- Sexual health advice and chlamydia screening programme
- Access to contraception
- Post termination review service

4.1.2 The Royal College of Obstetricians and Gynaecologists Guidelines on abortion care state that all women who request an abortion shall be seen by the abortion care providers within 5 days of referral and have the procedure performed within 7 days of that consultation. The service currently fails to meet these targets. We need faster referrals to nurse-led clinics. Greater access to medical methods of termination would facilitate shorter waiting times to carrying out the procedure thereby improving the capacity and capability of the new service.

### 4.2 Current Service Configuration

4.2.1 The current service is provided within the following accommodation:

- 8 day case beds
- Clinic room (multi-purpose - used for counselling/ultrasound/ examination)
- Waiting/sitting room
- 3 toilets & 2 showers
- Preparation/Store Room
- Disposal/DSR room
- Staff WC
- Nursing station/reception area
- Access to theatre
- Discrete entrance

### 4.3 Activity

4.3.1 May 2002 – April 2003 activity data:

| Activity | Attendances |
|---|---|
| Clinic appointments per year | 900 |
| Terminations performed; of which, | 660 |
| Medical terminations (= 1 day case + 2 out-patient visits) | 330 |
| Surgical day cases | 330 |
| Nurse led clinics x 3 per week | 18pts/week |
| Dispensing abortifacients | 600/annum |
| Counselling | 1360/annum |
| Ultrasound examination pre termination | 900/annum |
| Ultrasound examination post medical termination | 230/annum |

## 4.4 Service Trends

4.4.1 The main trend in relation to the TOP service is the development of closer and more collaborative links between:

- Community services
- GP Surgeries
- Family Planning Services
- Genito-Urinary Medicine
- Social Work Department

4.4.2 The projected increase in medical terminations and consequent reduction in surgical procedures will impact marginally on the service provided.

## 4.5 Service Philosophy/Concept

4.5.1 To provide, where possible, a nurse-led service which promotes women centred services with a high standard of individualised care respecting confidentiality.

4.5.2 To work in partnership with medical and Allied Health Professional colleagues to ensure the emotional and physical needs of the women using the service are met.

## 4.6 Key Departmental Relationships

4.6.1 The bidder shall design this part of the facilities so that the following relationships are met:

- Operating Theatres
- Ultrasound

4.6.2 A room relationship diagram of the TOP Unit is to be found at appendix 12.

4.6.3 There is scope for shared facilities with EPAS assuming there is no direct patient contact.

## 4.7 Key Operational Policies

4.7.1 *Hours of Operation*

The service operates Monday to Friday 8:30am to 5:00pm.

## 4.8 Staffing

4.8.1 5.75 whole time equivalent nurses/auxiliaries work in the unit (8 staff).

4.8.2 A maximum of 5 staff would be on duty at any time.

4.8.3 A maximum of 2 medical staff would be present in the unit for clinics or patient reviews.

4.8.4 One sonographer is present at ultrasound sessions.

## 5.0 ULTRASOUND

### 5.1 Outline of Services

5.1.1 The service provides a comprehensive obstetric ultrasound and pre-natal diagnostic facility for the women of Ayrshire including invasive diagnostic procedures. In addition, the centre is a recognised training centre for postgraduate ultrasound education.

### 5.2 Current Service Configuration

5.2.1 The current service is provided within the following accommodation:

- Ultrasound examination rooms (2)
- Invasive Ultrasound procedure room
- Reception/General Office
- Staff WC
- Patient toilets (2)
- Staff Base
- Superintendent Office
- Counselling Room
- Equipment storage room
- Waiting Room
- EPAS scanning Room

### 5.3 Activity

5.3.1 Approximately 15,000 ultrasound examinations are undertaken each year. The following table provides a breakdown of activity:

| Activity | Attendances (2002) |
|---|---|
| EPAS (early pregnancy) | 2282 |
| Booking (First antenatal clinic visit) | 3605 |
| Routine 20 week scan | 2882 |
| Detailed 20 week anatomy scan | 424 |
| Amniocentesis | 132 |
| Third trimester growth & well being | 2296 |
| Post natal scan | 143 |
| TOP | 670 |
| Other general obstetric scanning | 2212 |
| Gynaecology New Patient | 194 |

### 5.4 Service Trends

5.4.1 CUBBS. It is likely in the near future that women will be screened for fetal karyotypical abnormality in the first trimester (10 – 14 weeks) using combined ultrasound measurement of nuchal translucency and biochemical markers. The technology exists, has been tried and tested within Ayrshire Central Hospital and is awaiting funding nationally. This will lead to an additional estimated 2000 scans per year.

5.4.2 The introduction of new and better imaging techniques using 3-D/4-D technology and Doppler scanning will lead to extended scanning time per examination.

5.4.3 The routine 20 week anomaly scan will become more demanding as technology improves to allow better imaging of fetal structure, particularly the fetal heart. Cardiac abnormalities are the most frequently “missed” diagnosis. Current scanning time for this is 15 minutes. The RCOG/RCR currently recommends 20

minutes for the basic 20 week examination. In five years time this is likely to be extended to 30 minutes and may require longer sessions and additional staff trained in scanning techniques.

5.4.4 Although the birthrate is falling, the demand for more extensive imaging of the fetus is growing and is likely to continue to do so into the future.

**5.5 Service Philosophy/Concept**

5.5.1 Ultrasonographers aim to provide a comprehensive and efficient scanning service for pregnant women in Ayrshire. Our goal is for an obstetric ultrasound examination to be a pleasurable and reassuring experience performed in a comfortable environment. When problems occur we aim to provide a confidential service which is compassionate and sensitive to the individual woman's needs.

**5.6 Key Departmental Relationships**

The bidder shall design this part of the facilities so that the following relationships are met:

- Close to antenatal clinic, antenatal assessment suite and inpatient areas
- Shall have a discrete exit away from main waiting for women who have received bad news
- Trolley access for patients transferring to/from Labour Suite

**5.7 Specialty Specific/Technical Requirements**

5.7.1 Ultrasound machines and computers generate heat. A common criticism made by staff of new hospitals visited is the excessively high temperatures within ultrasound rooms. The machines have a relatively narrow band of tolerance for operating temperature. Air conditioning is mandatory.

5.7.2 Ultrasound scanning is performed in semi darkness and therefore ultrasound rooms do not necessarily require windows. However, the experience of staff in hospitals visited suggests that ultrasound rooms are oppressive and claustrophobic. Although rooms are blacked out during an examination, it is advantageous to have access to natural light as there is considerable dialogue between the sonographer and the women before and after the scan, especially so in the invasive procedure room.

5.7.3 Subdued lighting and dimmer switches are required.

5.7.4 The infrastructure cabling shall be capable of permitting a closed circuit video link between the scan rooms and the library/archiving/computer room for teaching purposes.

5.7.5 The infrastructure cabling shall be capable of permitting with a view to the future, video conferencing capability, which would enable direct links with the tertiary referral centre.

5.7.6 The infrastructure cabling shall be capable of permitting computers and printers in all scan rooms to record data, view patient's notes and prepare a hard copy ultrasound report.

## 6.0 INTRAPARTUM CARE: DELIVERY SUITE

The Unit provides an Ayrshire-wide service for safe and effective care during labour and delivery, including operative delivery. The service must be maintained on a 24 hour, 365 day a year basis.

The Acute Receiving Unit is an integral part of Intrapartum Services and will be described separately.

### 6.1 Outline of Services

6.1.1 Intrapartum care is offered to women in labour in two distinct areas:

- The midwifery unit which provides care for women with a normal pregnancy who wish little or no intervention
- The obstetric unit which cares for women with problem pregnancies requiring intervention and increased maternal and fetal monitoring

6.1.2 The Unit also provides care to women undergoing termination of pregnancy for fetal abnormalities and induction of labour in cases of intrauterine fetal death.

6.1.3 Teaching programmes for midwifery and medical students from the Universities of Paisley, Caledonian, Glasgow and other Universities, are provided. The Unit is also involved in the training of postgraduate specialist Registrars from the West of Scotland Deanery.

6.1.4 Intrapartum Services provides the following specialist functions:

- Facilities for immediate operative delivery at any time of day or night. This may be an instrumental vaginal delivery (forceps or vacuum) or caesarean section. Other surgical procedures are undertaken within the theatre complex including manual removal of placenta, evacuation of the uterus, suction termination of pregnancy, laparoscopy for the diagnosis of possible ectopic pregnancies and surgery for proven ectopic pregnancies both by laparotomy and minimal access routes. Occasionally life saving hysterectomy may be required.
- A 24 hour epidural service
- Facilities for labour and delivery in a birthing pool
- High-dependency care for ill pregnant women at any stage of pregnancy and into the postnatal period. This includes care up to ventilatory support. Any woman requiring assisted ventilation is transferred to the Intensive Care Unit at Crosshouse Hospital
- Bereavement facilities for women dealing with pregnancy loss
- Blood storage facilities for the entire hospital are located within the delivery suite

### 6.2 Current Service Configuration

6.2.1 The current service is provided within the following accommodation:

- A Delivery Suite comprising:
    - A self-contained four bedded Midwifery Unit consisting of four delivery rooms, a separate room containing the birthing pool and a patient sitting room
    - A seven bedded Obstetric Delivery Unit with six delivery rooms, a larger high dependency room for intensive monitoring and twin deliveries, a counselling room and a patient sitting room

- A four bedded Observation Unit
- An emergency theatre contained within the Delivery Suite with a separate patient transfer area
- An elective theatre with a two bay reception-recovery area

## 6.3 Activity

6.3.1 *Deliveries*

The Unit delivered 3384 babies in 2002. Over the past ten years, there has been a steady decline in the numbers of deliveries, this is in line with changing demographics in society and reflects the experience of other Scottish maternity hospitals. Although the number of deliveries has fallen, the proportion of more complex deliveries has increased; this is reflected in the rising Caesarean section (CS) rate. The factors behind this rise are complex and not fully understood; it is unlikely that the CS rate will reduce significantly over the next few years and may continue to rise.

| Year | Deliveries | CS Number (Rate %) |
|---|---|---|
| **1993** | **4339** | **795 (17.8%)** |
| **1994** | **4108** | **728 (18.2%)** |
| **1995** | **4019** | **744 (18.5%)** |
| **1996** | **3917** | **794 (20.2%)** |
| **1997** | **3993** | **798 (20%)** |
| **1998** | **3880** | **847 (21.8%)** |
| **1999** | **3611** | **749 (20.7%)** |
| **2000** | **3528** | **828 (23.4%)** |
| **2001** | **3522** | **871 (24.7%)** |
| **2002** | **3384** | **934 (27.6%)** |

6.3.2 *Midwifery Unit*

| **Activity Type** | **2002** |
|---|---|
| Women admitted in labour | 1028 |
| Transfers to Obstetric Delivery Unit | 244 |
| Deliveries in Midwifery Unit | 784 |

6.3.3 *Obstetric Delivery Unit*

| **Activity Type** | **2002** |
|---|---|
| Women labouring | 2200 |
| Deliveries in Obstetric Delivery Unit | 1638 |
| Transfers to theatre | 582 |

6.3.4 The Delivery Suite does not routinely provide postnatal care beyond the immediate postpartum period of three to four hours.

6.3.5 *Theatre*

| Activity Type | 2002 |
|---|---|
| Elective Caesarean section | 346 |
| Emergency Caesarean section | 552 |
| Forceps/ventouse | 30 |
| Uterine evacuation | 359 |
| Termination of pregnancy | 464 |
| Laparoscopies | 47 |
| Laparotomy for ectopic pregnancy | 49 |

6.3.6 During 2002, a total of 1994 cases occupied 3000 theatre hours.

## 6.4 Staffing

6.4.1 The following information relates to the staffing of the delivery suites:

| | Midwives / Nursing staff* | | Medical Staff | | Anaesthetists | | Paediatricians | |
|---|---|---|---|---|---|---|---|---|
| | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX |
| Midwifery Unit | 1 | 3 | 0 | 3 | 0 | 2 | 0 | 4 |
| Obstetric Unit | 1 | 3 | 1 | 3 | 1 | 2 | 0 | 4 |
| High Dependency | 1 | 4 | 1 | 3 | 1 | 3 | 0 | 4 |
| Theatre | 4 | 6 | 2 | 4 | 1 | 3 | 1 | 4 |
| Recovery/patient | 1 | 3 | 1 | 3 | 1 | 2 | 0 | 2 |

- *includes midwives, anaesthetic assistants, auxiliary nurses
- MIN refers to minimum number of specified staff during routine care
- MAX refers to maximum number of staff called to patient area to respond to obstetric or paediatric emergency
- The patient's birthing partner is normally present in these areas.

## 6.5 Service Trends

6.5.1 *Technology/Developmental Technology*

- Increasing sophistication of monitoring equipment
- Introduction of patient's hand-held case-records
- Proliferation of lap/palm top computers
- Continued development of the role of the midwife
- Increased consultant obstetrician delivery of care out of hours

6.5.2 *Links with Community*

- Increasing links with all healthcare workers in the community setting reflecting care closer to home

6.5.3 *Anticipated Birth Rates*

- It is anticipated that the birth rate will continue to fall but the dependency of patients will rise. The average age of women at first confinement has increased in Scotland. Women will be older with increasing medical problems
- The rate of CS has shown a steady increase over the past 10 years and this rate is showing no signs of slowing. This will result in increased theatre and recovery utilisation as well as a longer postnatal stay

6.5.4 *Other*

Society has become better informed about health matters in general and expects to be involved in decisions regarding care. This is particularly true in the field of obstetrics since pregnancy is not viewed as an illness, but a life event. With low maternal mortality rates, the focus has shifted from safety aspects to satisfaction with the birth experience and women's expectations playing a large part in this; expectations will continue to rise

**6.6 Service Philosophy/Concept**

6.6.1 The multi-professional team will:

- provide women-centered care
- promote of normal childbirth with a commitment to provide, where possible, seamless care when the birth process becomes more complex
- support women who wish to deliver with little or no intervention
- provide appropriate facilities to manage the high-risk birth experience up to and including high-dependency

**6.7 Key Departmental Relationships**

The bidder shall design this part of the facilities so that the following relationships are met:

- ARU adjacent to main hospital entrance for ease of access for women in labour (consideration shall be given to providing distressed women in labour with rapid and private access to the admissions unit without passing through busy public waiting areas)
- The Midwifery and Obstetric Units shall be close to the ARU to allow rapid transfer of women in labour
- A separate ambulance entrance adjacent to Delivery Suite shall be available for the rapid transfer of ill women.
- Birthing complex (Midwifery Unit, Obstetric Delivery Unit, Theatres) close to neonatal unit, preferably linked by corridors restricted for staff use only.
- Theatres close to ward users of theatre i.e. TOP and EPAS. Corridors restricted to staff use only
- Link corridor to main Crosshouse site close to high dependency areas of Obstetric Delivery Unit and theatre

**6.8 Key Operational Policies**

- Women arriving in theatre for elective procedures and who are not in labour shall not enter through the Delivery Suite but by a separate entrance

- Women who have had a CS (either elective or emergency) and who have been transferred from theatre to the recovery area shall progress towards the wards and not return through the Delivery Suite. An exception would be ill women who have undergone a more complex procedure and who may require a period of observation in a high dependency area within the Delivery Suite

## 7.0 INTRAPARTUM CARE: ACUTE RECEIVING UNIT

### 7.1 Outline Of Services

7.1.1 The ARU opened in 2000. The purpose of the unit is to provide prompt assessment of women in labour or who have complications of pregnancy that may require unscheduled admission to hospital. The aim of the unit is to facilitate access to hospital care and reduce unnecessary admission to hospital and avoidable separation of the woman from her family. The Unit functions 24 hours per day, 365 days per year.

7.1.2 All unplanned admissions to the hospital are assessed in the ARU. The majority of admissions are self referrals. Women contact the Unit by telephone to discuss symptoms and a preliminary telephone assessment is made. Based on the woman's history, she may be advised to attend the hospital for further assessment either by midwifery or medical staff as appropriate. Staff make the diagnosis, plan management and transfers the woman to the area of hospital most appropriate to her needs.

7.1.3 In 2002 there were 4765 admissions to the Unit; 2745 women were in labour and admitted to labour ward, 1670 women were sent home directly from the unit following appropriate investigation of the problem and determination of a management plan.

7.1.4 The primary function of the Unit is to assess women who present in labour or with complications of pregnancy. The Unit undertakes monitoring of fetal heart rate (CTG) and monitoring women with raised blood pressure (automated blood pressure recording). The ARU also provides a short stay observation facility (6 – 8 hours) for women who may, or may not be in labour and those who present with spontaneous membrane rupture awaiting augmentation.

### 7.2 Current Service Configuration

- Four assessment areas
- Four short stay obstetric beds
- Reception/Nursing station
- Patient sitting Room/Lounge
- Close to Medical Records Admissions
- At a distance from Labour Suite

### 7.3 Activity

7.3.1 Labour Ward statistics, over the last six years, show that the number of emergency admissions is approximately one and a half times the number of deliveries and this figure is unlikely to change.

7.3.2 Admissions for unplanned episodes of care 1997 – 2002

| Year | Admissions |
|---|---|
| 1997 | 6625 |
| 1998 | 6508 |
| 1999 | 6352 |
| 2000 | 6300 |
| 2001 | 5671 |
| 2002 | 4765 |

7.3.3 *ARU*

| Activity | 2002 Data |
|---|---|
| Daily throughput of women | 18 |
| Phone calls | 6825 |
| Admissions for assessment | 4765 |
| Transfer to Delivery Suite | 2475 |
| Transfer to inpatient ward | 620 |
| Transfer home | 1670 |

## 7.4 Service Trends

7.4.1 The service will, and shall, continue to reduce unnecessary admission to hospital. This is likely to result in an increase in the number of women being assessed within the acute receiving unit. Similarly, the number of investigations carried out within the Unit is likely to grow.

## 7.5 Service Philosophy/Concept

7.5.1 To provide a warm, welcoming, calming environment in which the woman in labour, or who has complications of pregnancy, can be assessed; the woman's subsequent care can be planned and that plan implemented from the Unit.

7.5.2 The service shall be designed to enable a seamless hand-over of care from the Community Midwife to the hospital team. Care is midwifery led with care devolved to obstetric staff where appropriate.

## 7.6 Key Departmental Relationships

The bidder shall design this part of the facilities so that the following relationships are met:

- Close to/part of labour suite
- Close to/easy access to medical records

## 8.0 INPATIENT SERVICES

### 8.1 Outline of Services

8.1.1 The Inpatient department provides care for pregnant women from the diagnosis of pregnancy until delivery and beyond; services are maintained on a 24 hour, 365 days per year basis. This includes the care of the pregnant woman with medical, obstetric or social problems.

8.1.2 A dedicated facility for the care of bereaved parents in the SANDS Bereavement Suite is currently available. This will be included in the intrapartum area of the new maternity hospital.

8.1.3 Specialist functions undertaken within the department include:

- Care of women suffering miscarriage or ectopic pregnancy, managed both medically and surgically
- Care of complex obstetric patients e.g. pregnant women with diabetes, epilepsy and other medical conditions, as well as pregnant women with pregnancy related complications, e.g. Polyhydramnios, pregnancy induced hypertension and those with chronic problems demanding longer stay
- Care of women with multiple pregnancy
- Care of women suffering perinatal bereavement.
- Care for disabled women
- Care of women postpartum requiring complex nursing care, e.g. those women with wound problems, indwelling urinary catheters, intravenous infusions and complications of anaesthesia
- Provision of preparation for parenthood facilities
- Physiotherapy treatments, post-natal exercises and advice, including treatment of musculoskeletal and ligamentous problems arising from pregnancy both in the ante-natal and post-natal period
- Physiotherapy treatment of perineal and soft tissue trauma following delivery
- The use of electrotherapy as a modality in the treatment of post-natal problems (treatment room)
- The use of ultrasound in the treatment of post-natal problems (treatment room)
- Care of jaundiced babies requiring phototherapy - implications for equipment storage
- Support for mothers establishing breast feeding (breast feeding room)
- Provision of Hostel facilities for patients from Arran awaiting labour

### 8.2 Current Service Configuration

8.2.1 *Early Pregnancy*

Currently, the early pregnancy service is divided into 2 areas; a day case facility where women undergo diagnostic testing of their pregnancy including a dedicated ultrasound suite and, a 10 bedded in-patient unit (Ward 4) for patients with protracted needs in the early pregnancy phase from diagnosis to 20 weeks gestation. In this area there are approximately 1,000 patient admissions per year as well as 2,000 out-patient attendances. Referrals to the service arise from general practitioner, self, community midwife and ante-natal clinic. Patients with a failed pregnancy are treated either medically or surgically at a time convenient to the woman. At the present time, the unit accepts women with post-termination complications. The average length of stay in the in-patient unit is 2 days. As far as possible the unit promotes normality, the facilities are designed specifically to promote self care. Presently, there are no specific facilities for the disabled pregnant woman in the inpatient areas.

8.2.2 *Ante-Natal and Post-Natal*

Antenatal and postnatal inpatient services are managed in 3 different areas; in addition, the ARU has 4 short stay beds for patients requiring short-term observation:

- Ward 1 has 10 low risk short stay beds for post-natal mothers
- Ward 3 has 27 mixed ante and post-natal beds plus the SANDS bereavement suite
- Ward 5 has 24 mixed ante and post-natal beds

8.2.3 Referrals to the ante-natal service come from community midwives, general practitioners, via obstetricians from ante-natal clinics, the Ante-Natal Assessment Suite or a community ante-natal clinic. Patients are admitted for further assessment of pregnancy, including:

- Fetal monitoring
- Diagnostic testing for blood pressure problems
- Ultrasound assessment
- Pre-operative preparation and preparation for induction of labour

8.2.4 In the post-natal period, women are cared for following vaginal, instrumental or operative delivery and readmissions to hospital. Women may also require a longer stay because of neonatal problems for example:

- Care of the newborn with feeding problems
- High risk babies with hypoglycaemia
- Drug abstinence syndrome
- Jaundice requiring photo-therapy treatment
- Care of mothers with mental health problems

## 8.3 Activity

8.3.1 *Obstetric Activity*

| Year | 92/93 | 93/94 | 94/95 | 95/96 | 96/97 | 97/98 | 98/99 | 99/00 | 00/01 | 01/02 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Bed Complement** | 141 | 110 | 102 | 102 | 85 | 85 | 85 | 85 | 82 | 82 |
| **Available Beds** | 52651 | 43286 | 38217 | 37078 | 31376 | 31025 | 31371 | 31403 | 31038 | 30159 |
| **Occupied Beds** | 28890 | 26240 | 24187 | 22564 | 21263 | 20485 | 19230 | 17923 | 17445 | 16799 |
| **% OCC** | 54.9 | 60.6 | 63.3 | 60.9 | 67.8 | 65.3 | 61.3 | 57.4 | 56.9 | 56.6 |
| **Births** | 4433 | 4306 | 4058 | 3997 | 3975 | 3922 | 3873 | 3569 | 3565 | 3490 |
| **Year on Year Change (%)** | | **-2.86** | **-5.76** | **-1.5** | **-0.55** | **-1.33** | **-1.25** | **-7.85** | **-0.11** | **-2.1** |

## 8.4 Service Trends

8.4.1 *General*

- Although the birth rate is falling, there seems to be an increasing number of older mothers embarking upon pregnancy for the first time
- Despite the falling birth rate there is an increase in the complexity of maternity cases
- There is a rising drug problem resulting in longer in patient stays ante and postnatally
- Patients have higher expectations (changes to litigation arrangements)
- Increasing requirements for security

- The Ayrshire maternity unit will be designated as a level 2c service, this means that the service would be expected to cope with most complex maternity cases only transferring out those patients who require tertiary care
- The medical care of women with complications of pregnancy is likely to be based on a Consultant based service model as opposed to current Consultant led service model

8.4.2 *Technology*

- Increasing likelihood of patient held maternity records
- Implementation of computerised care planning and "paper-light" processes
- Electronic discharge summaries and on-line booking of appointments (ECCI Project)

8.4.3 *Links to the Community*

- Care based in community clinics as at present but enhanced by midwife as lead professional in normal maternities
- Improved access to midwifery services in rural areas
- The development of electronic discharge letters and electronic appointments is likely to come in the near future (ECCI project). This will enhance community/hospital communication

8.4.4 *Likely Technical Advances*

- Increasing laparoscopic surgery, resulting in shorter length of stay
- Medical management of miscarriage and ectopic pregnancy which will shift the emphasis of care from the in patient to the outpatient area
- Increased ultrasound input from midwives resulting in better access to service and possible reduction in length of stay
- Physiotherapy will use pulsed short wave treatment for perineal trauma
- National requirement for hearing testing of neonates requiring the availability of a suitable soundproofed room

**8.5 Service Philosophy/Concept**

8.5.1 Inpatient services aim to deliver:

- high quality care in early pregnancy, antenatal and postnatal environments
- holistic care giving due consideration to cultural requirements
- integrated antenatal and postnatal areas
- "graduated care" arrangements from "low risk" through to complex maternities
- early pregnancy beds adjacent, but separate from, antenatal/postnatal area with dedicated dining room/relaxation facilities
- a safe and secure environment for patients and staff
- care in a comfortable homely environment in single and multi-bed rooms with en suite facilities (shower, bidet and toilet)
- care in disabled facilities for patients with reduced mobility or who are wheelchair bound
- care where patient privacy and confidentiality is respected but where women have the opportunity to integrate socially at meal times and for relaxation
- appropriate facilities for breast feeding mothers in all areas (including staff)
- support for those mothers who are unable to breast feed
- sufficient storage facilities so that equipment is not stored in corridors
- facilities for partners/visitors, e.g., a kiosk for refreshments, newspapers, etc
- the provision of a "flat" with shared lounge and toilet/bathroom facilities for 2 women in a "hostel" type environment for women not requiring midwifery input but who require to be within the extended in-patient environment

## 8.6 Specialty Specific Room Requirements

- A treatment room for physiotherapy treatment with appropriate equipment
- A sound-proofed room to enable audiology testing and examination of the newborn
- Adequate consultation area/counselling area for the confidential discussion of sensitive issues

## 8.7 Key Departmental Relationships

The bidder shall design this part of the facilities so that the following relationships are met:

- ARU/Admission Unit
- Delivery Suite
- Theatre
- Neonatal Unit
- Ultrasound Department
- Parenthood Education Department

## 8.8 Specialty Specific/Technical Requirements

8.8.1 The Physiotherapist will require access to a specialist treatment room which can be used to deliver pulsed short wave treatment for perineal trauma. Note that there is a Health & Safety regulation which requires a 3m radius around the equipment.

## 8.9 Key Operational Policies

8.9.1 There is a requirement for direct access to theatre facilities from the in-patient bed area without recourse to a corridor with public access.

## 9.0 NEONATAL SERVICES

### 9.1 Outline of Services

9.1.1 The Neonatal Unit is a specialist care area designated for the delivery of neonatal intensive care, high dependency care, special care and isolation facilities for ill and premature infants and the provision of support to their families.

9.1.2 The unit provides facilities for neonates requiring artificial ventilation and intensive physiological monitoring.

9.1.3 Neonatal unit staff provide a resuscitation service in high risk delivery situations. They also participate in the screening of well infants in post-natal areas and medical care if necessary.

9.1.4 Referrals to the unit come from Labour Suite, Theatres and Postnatal areas.

9.1.5 The unit participates in the Neonatal Bed Bureau for Scotland and in the West of Scotland Neonatal Transport Network. The only impact that this may have on space is within the hostel facility.

9.1.6 The Neonatal Homecare Team supports the transition from hospital to home.

9.1.7 The Neonatal Unit is a learning placement for medical students and pre and post registration midwifery students.

### 9.2 Current Service Configuration

9.2.1 Whilst a significant proportion of the Neonatal Service workload takes place within the neonatal unit, accommodation to support the work of neonatal staff is provided, or made available, elsewhere in the Maternity Hospital.

9.2.2 Currently 25 cots are accommodated within the Neonatal Unit in the following configuration:

- Neonatal Cots (20)
- Neonatal Intensive Care (5)

9.2.3 Access to consultation/examination rooms is required when a baby has to be reviewed outwith a scheduled clinic appointment. Currently this is provided within the ante-natal clinic.

9.2.4 Neonatal resuscitation areas are accommodated within each theatre, all obstetric delivery rooms and in postnatal wards.

### 9.3 Activity

9.3.1 The following activity data relates to the period 1998-2001:

| | 1998 | 1999 | 2000 | 2001 |
|---|---|---|---|---|
| Admissions | 618 | 584 | 526 | 521 |
| Unit Occupancy (%) | 46 | 49 | 57 | 62 |
| ITU Cot Occupancy (%) | 38 | 62 | 83 | 81 |
| Ventilated Bed Days | 207 | 622 | 884 | 509 |

## 9.4 Staffing

9.4.1 The following information relates to the maximum number of people likely to be present simultaneously in neonatal areas:

| | Medical Staff | Midwives | Parents | Visitors | AHP/ Other |
|---|---|---|---|---|---|
| ITU | 4+2 | 5 | 10 | 5 | 3 |
| HDU | 4+2 | 2 | 8 | 4 | 3 |
| Special care (per room) | 4+2 | 2 | 8 | 4 | 3 |
| Resuscitation Areas | 3 | 2 | 1 | 0 | 1 |
| Coffee room | 7 | 6 | 0 | 0 | 1 |

The "+2" in the medical staff column relates to medical students.

## 9.5 Service Trends

9.5.1 *Technology/Developmental Technology*

Neonatology is a specialty that has undergone rapid development, particularly over the last decade. As new knowledge and experience have been gained significant progress has been made in the management of ill and pre-term babies; this is reflected in improved survival rates particularly of extremely low birth weight babies. These trends are likely to continue.

9.5.2 Education and training are important in the development of skills and competencies for individual staff, enhancing the management the unit is able to provide.

9.5.3 Development of the role of the Advanced Neonatal Nurse Practitioner and Neonatal Practice Development Midwife will allow research and practice changes within the unit.

9.5.4 *Links with Community*

A Neonatal Homecare Team supports the transition from hospital to home. The team liaises with health visitors, general practitioners, community midwives, community paediatric nurses and social workers.

9.5.5 The neonatal unit has close links with:

- Child Health Department
- Stillbirth and Neonatal Death Society

9.5.6 Local voluntary fundraising by community is highly supportive of the neonatal unit.

None of the above impacts on space requirements.

9.5.7 *Anticipated Birth Rates*

It is anticipated that the birth rate may decrease slightly if current trend continues. However, extremely low birth weight admissions are not decreasing in proportion to the falling birth rate due to an increase in those being offered, and responding to, resuscitation at birth.

## 9.6 Service Philosophy/Concept

9.6.1 The staff of the Neonatal Unit recognises that the family is the most important and constant factor in a baby's life. Our commitment is to recognise the needs of each baby as an individual and to work in partnership with the family. Our aim is to create a safe, comfortable and caring environment and to provide facilities suitable for the care of each baby. We encourage continuing education, training and research to ensure that each baby and the family are cared for by appropriately trained staff.

## 9.7 Functional Content

9.7.1 The Neonatal Unit interfaces with all departments within the maternity service. Specific space requirements within other departments are highlighted below.

9.7.2 *Emergency*

- Resuscitation areas in all delivery rooms, theatre, and postnatal wards.

9.7.3 *In-Patient*

- Access to a sound attenuated room for Neonatal Hearing screening in in-patient area; this will have a dual purpose doubling as a baby examination room
- Transitional Care Area (4 cots) in postnatal area

*All areas above are already identified in in-patient Accommodation*

9.7.4 *Outpatient areas*

- Availability of a room close to the Neonatal Unit for outpatient ultrasound and return outpatients who require a consultation outwith normal outpatient clinic appointment times. This activity can be undertaken in one of the scheduled counselling rooms.

9.7.5 *Theatres*

- Facilities for neonatal resuscitation are required within the theatre suite. Space for this function requires to be taken into account in the design of the theatres.

9.7.6 *Neonatal Unit*

Outline schedules of accommodation are provided at appendix 6.

## 9.8 Specialty Specific Room Requirements

- All rooms must have adequate work surfaces
- All rooms must have dimmable lighting and noise-reducing measures conducive to delivering developmental care
- All areas must have oxygen, air, suction points
- All areas must be decorated in appropriate colours and have child-friendly murals throughout the unit
- Adequate shelving and storage in each room
- Availability of information boards and white boards
- Flexibility of rooms in order that they can be multi functional (i.e. the ability to ventilate babies in rooms other than ITU)
- Good visibility between rooms especially special care areas; windows between rooms at waist height are preferable
- Use of blinds (built into glass panels) between rooms to give privacy to breast feeding mothers or during medical examination
- Adequate sinks in each area in line with infection control standards

- Medi-rails system available at every baby care room/bay
- Sound proofed counselling/interview room near to ITU but configured in a way that does not require parents to walk past other areas or other parents to access it
- Adequate ventilation to cope with high activity and heat generated by equipment
- Availability of water coolers for staff and parents

**9.9 Key Departmental Relationships**

The bidder shall design this part of the facilities so that the following relationships are met:

- Close proximity to Delivery Suite/Theatres
- Blood gas room near Neonatal ITU; could be shared with theatre
- Staff only corridor between delivery suite, theatre and Neonatal Unit
- Close proximity to Medical Physics
- Shared changing room facilities with delivery suite / theatre

**9.10 Specialty Specific/Technical Requirements**

9.10.1 The previous sections highlight the need to build flexibility into the Neonatal Unit design. ITU and HDU beds will require similar configurations in order that the bed availability can be 'flexed' to accommodate fluctuating workloads. This will require:

- Piped oxygen, air, suction at all baby areas
- Additional oxygen, air and suction points at each space in ITU /HDU
- Pendants with flexible bays in ITU
- Articulated arm in one isolation room for ITU use, if necessary
- Data points at all cot spaces
- Sound proofed counselling room
- Lighting conducive to developmental care (dimmable lights), however, these must allow good visibility when required
- Examination lights are required at all spaces
- Noise reducing devices (ceiling and floors)
- ITU / HDU adjacent to each other with isolation facilities in close proximity
- ITU to have staff base, drug preparation area and drug fridge/cupboard within its area
- Intercom facilities between all areas
- Telephone points in ITU /HDU and baby areas to have non ringing telephones with flashing lights only

The infrastructure cabling shall be capable of permitting a:

- Video link between NNU and maternity HDU for mothers who are unable to visit their baby in ITU
- Video telephone/door entry system linked to outside door to be located in an area other than reception for when reception is unmanned
- IT links for telemetry between Crosshouse and tertiary services

**9.11 Key Operational Policies**

- Use of natural light in all baby / parent areas
- Feeling of space with natural light
- "Developmental Care Ethos" throughout unit
- Baby pathway to progress through the Unit from ITU, via HDU and Special Care, to the Family Room and then home, reflecting and reinforcing the improvement in the baby's condition. ITU shall be furthest from, and the Family Room nearest to, the main entrance/exit
- ITU shall be adjacent to the entrance from the delivery suite and theatre

- Needs only one main entrance and a staff corridor providing rapid access from the delivery suite and theatre
- Security camera at unit entrance
- Ambience shall be family friendly and not too clinical

## Neonate's Journey