

# The Saudi Birth Centre Standards

Midwifery Units Advisory Committee Midwifery Department General Department of Nursing Affairs Deputyship for Therapeutic Services

#### **Preface**

This document presents the **midwifery-led birth centre standards** of care in Saudi Arabia recognising the need for evidence-based care, placing the family at the centre. Therefore, the Midwifery Department at the General Department of Nursing Affairs in the Ministry of Health, Saudi Arabia has initiated a Midwifery Units Advisory Committee (MUAC) on February, 2021 under Dr. Tareef Alaama, Deputy Minister for Curative Services and the support of Dr. Mohammed Alghamdi, General Director of Nursing Affairs, with a membership of consultants from Ministry of Health and various sectors. The creation of the birth centre standards is the second output of the advisory committee.

This is the first version of the birth centre standards, which the committee has made great efforts to accomplish. It has adopted the Midwifery Unit Network (MUNet) (Roccalhenacho, et al, 2018) which is based on the most recent evidence-based practice. These standards should be reviewed every 5 years after audit from the time of implementation of these standards.

We would encourage stakeholders and leaders in Saudi Arabia to use this tool as part of local quality improvement and to take the initiative to move maternity care forward.

Chairperson of the Midwifery Units Advisory Committee
Dr Roa Altaweli, PhD, RM

### **Acknowledgments**

The General Department of Nursing Affairs would like to acknowledge and thanks many departments and individuals who have reviewed and provided constructive feedback to the midwifery-led birth centre standards. This document could not have been be accomplished without the commitment and contribution of the Midwifery Units Advisory Committee members.

Committee Members		
Name Title and Affiliation		Membership
Dr. Roa Altaweli	Consultant Midwife Director of Midwifery Department General Department of Nursing and Midwifery Affairs Ministry of Health, Saudi Arabia  Chairpe	
Mrs. Samia Alzahrani	Senior Specialist Midwife General Department of Nursing and Midwifery Affairs Ministry of Health, Saudi Arabia  Vice Chairperso	
Dr. Fatma Alshangiti	Consultant Obstetrics and Gynaecology, Consultant Female Pelvic Reconstructive and Minimal Invasive Gynaecologic Surgeries Leader of Obstetrics and Gynaecology Development Services Ministry of Health, Saudi Arabia	
Dr. Fahima AlSomali	Director of Nursing Women's Specialised Hospital King Fahad Medical City, Saudi Arabia	Member
Dr. Insaf Shaban	Consultant Midwife; Associated Professor College of Nursing, Taibah University, Saudi Arabia Princess Salma Faculty of Nursing, All albayt University, Jordan	Member
Dr. Mohammed AlQahtani	Consultant Family Medicine Deputy of General Director of Primary Health Care Centres Ministry of Health, Saudi Arabia	Member
Ms. Nawal Sindi	Senior Specialist Nurse Head of Training and Development Department General Department of Home Health Care Ministry of Health, Saudi Arabia  Member	

Committee Members			
Name Title and Affiliation Mer		Membership	
Ms. Mona Bukhari	Midwife General Department of Nursing and Midwifery Affairs Ministry of Health, Saudi Arabia	Coordinator	
Dr. Lucia Rocca- Iheanacho	Lecturer and Programme Director MSc Global Maternal Health, Centre for Maternal and Child Health Research, School of Health Sciences, City, University of London, CEO Midwifery Unit Network, United Kingdom	External Advisor	

Reviewers			
Name	Title and Affiliation		
Dr. Alaa Mansoor	Consultant Obstetrics and Gynecology, Maternal fetal medicine specialist Model of care lead at Riyadh Second Health Cluster Chairman of safe birth network		
Ms. Eman Mohammed Alturaiki	Director General of Patient Experience Center		
Mr. Ahmed Hamad Al Fehaid	Director General of Academic Affairs and Training		
Dr. Zolfa AL Rayess	Consultant Family Medicine Surveyor in CBAHI and SCFHS, Member of scientific committee for women's health		
Dr. Shaker Abdulaziz Alomary	Consultant of Family Medicine Director General of the General Directorate of Health Programs and Chronic Disease, MOH		
Eng. Sultan Hamzah Alhendi	General Manager of Engineering Services General Administration of Engineering Services		
Ms. Mona Faia Alsarawi	Director General, Quality and Patient Safety		
Dr. Abdulkarim Taha Krimly	Consultant Obstetrics and Gynecology, President and Founder of Avenue Medical Group and PhysioNatal		

### **Table of Contents**

Preface	1
Acknowledgments	2
Introduction	7
Aim of Birth Centre Standards	8
Midwifery Scope of Practice	8
Topic 1: Philosophy and Model of Care	9
Topic 2: Working across Professional and Physical Boundaries	10
Topic 3: Staffing and Workload	13
Topic 4: Policy, Procedure and Training Requirements	15
Topic 5: Environment and Facilities	19
Topic 6: Leadership	23
Topic 7: Clinical Governance	24
Appendix 1: Birth Centre Design	29
Glossary	31
References	33

Topic 1	Philosophy and Model of Care		
	Standard 1	The midwifery-led birth centre has a written and public philosophy of care setting out shared values and beliefs	
Topic 2	Working across Professional and Physical Boundaries		
	Standard 2	There is a shared written commitment to mutual respect and cross-boundary working across the whole maternity service	
	Standard 3	The birth centre has a linked lead midwife, a linked obstetrician and neonatologist within a linked health institution	
	Standard 4	There is a clear policy and procedures for transfers	
Topic 3	Staffing and W	orkload	
	Standard 5	Essential staffing includes a staff team and midwifery leadership on site to promote high standards, a sense of ownership and an appropriate philosophy of care	
	Standard 6	Assessment of workload should include all activities on the Birth Centre, not just the intrapartum care and number of births	
Topic 4	Birth Centre Policy, Procedure and Training Requirements		
	Standard 7	The birth centre has evidence-based guidelines, policies and procedures subject to regular review	
	Standard 8	The birth centre has a policy relating to respect, diversity and social inclusion	
	Standard 9	The birth centre has a clear policy and procedures, training and skills required of midwives in place	
	Standard 10	The birth centre has plans for education and continuing professional development	
	Standard 11	The birth centre has a framework for preceptorship and orientation	
Topic 5	Environment and Facilities		
	Standard 12	The birth centre offers an environment that promotes a family-centred model of care and building relationships	
	Standard 13	The birth centre offers an environment which supports mobilisation and active birth	
	Standard 14	The birth centre offers an environment that protects and promotes relaxation, privacy and dignity	
	Standard 15	The physical layout and design of the birth centre conveys the family-centred philosophy of care model	
	Standard 16	The birth centre is visible and accessible in the community	
Topic 6	Leadership		
	Standard 17:	There is a visible and consistent leadership within the Birth Centre	
	Standard 18:	The birth centre has high-quality transformational leadership	
	Standard 19:	There is a multidisciplinary and service users' advisory group, which sets out a vision for the birth centre	

Topic 7	Clinical Governance		
	Standard 20	The birth centre commits to a philosophy of providing information as early as possible, and keeping decisions open	
	Standard 21	The birth centre pathway is open to all women for personalised and individualised care	
	Standard 22	The birth centre has specific referral pathways	
	Standard 23	The birth centre has a policy acknowledging midwives' autonomy and accountability	
	Standard 24	The birth centre has a policy acknowledging women's autonomy	
	Standard 25	The birth centre has guidance on eligibility criteria and choice of place of birth	
	Standard 26	The birth centre demonstrates commitment towards continuous improvement	
	Standard 27	The birth centre has a robust information system	
	Standard 28	The birth centre shall include plans for communication and marketing	

### Introduction

In Saudi Arabia the future vision 2030 is to have midwifery-led continuity of maternity care as standard. Uncomplicated births can take place at home or at a birth centre, in addition to hospitals depending on the preference of the woman and her family (MOH, 2017).

Currently, there is a growing body of evidence demonstrating that continuity of midwife-led care is mostly suitable for healthy women with uncomplicated pregnancies in locations with well-trained midwives and good health systems. When compared to women using hospital based maternity care, midwife-led care in out of hospital settings is associated with maternal reports of more positive pregnancy and birth experiences, better outcomes for healthy women of any parity, along with similar perinatal outcomes, especially for second and subsequent babies. However, to date 2021 there are no midwife-led units available in Saudi Arabia and this limits the opportunity for provision of optimal, consistent, high quality, safe, cost-effective care for women and their babies.

### **Aim of Birth Centre Standards**

The aim of the Saudi birth centre standards is to improve the quality of maternity care, reduce variability of practices, and facilitate a family-centred model of care. These standards could provide a powerful model for best practices for MotherBaby-Family Unit and facilitator for change both in and out of hospital settings. Standards have been developed to guide midwives, managers and commissioners across Saudi Arabia in creating and developing birth centre.

### **Midwifery Scope of Practice**

The scope of midwifery practice is the expected range of roles, functions, responsibilities and activities that a midwife registered with the Saudi Commission for Health Specialities (SCFHS) is educated for and is competent and authorised to perform. It defines the accountability and limits of practice in Saudi Arabia.

The midwife working in birth centers should provide necessary support, care and advice during pregnancy, and postnatal period. This care includes preventative measures, the promotion of normal birth, the detection of complications in mother and child, the access of medical care or other appropriate assistance and the carrying out of emergency measures. The midwife has an important task in health counselling and education, not only for the woman, but also within the family and the community. This work should involve antenatal education and preparation for parenthood and may extend to women's health, sexual or reproductive health and childcare.

### **Topic 1: Philosophy and Model of Care**

# Standard 1: The midwifery-led birth centre has a written and public philosophy of care setting out shared values and beliefs

The midwifery-led birth centre has a written philosophy of care document which needs to be mutually agreed among stakeholders. This document needs to be in line with the philosophy of care and values of the wider maternity services and includes a commitment towards:

#### Supporting a physiological pregnancy, labour, birth and care of the baby

- Supports staff skills and practices that support physiological pregnancy, labour, birth, bonding, neonatal care and transition to parenthood; (MotherBaby-Family Unit)
- States that interventions should be considered and justified in relation to best clinical evidence, on the basis that the potential benefits outweigh the potential harms.

### Offering personalised and supportive care that promotes physical and psychological wellbeing

- Recognises childbirth as a key life event and transition for mothers, babies, families and birth companions;
- Promotes emotional wellbeing in pregnancy, labour and birth and in the early days of motherhood;
- Respects women's human and reproductive rights to dignity, privacy and autonomy;
- · Welcomes the woman's chosen companions;
- Commits to providing a positive start to caring for the baby, including working with Baby Friendly accreditation (UNICEF, 2017);
- Endorses effective and prompt escalation and transfer to obstetric care, while still focusing on positive experiences and personalised supportive care;
- Acknowledges a clear understanding that caring for staff wellbeing helps to promote caring behaviours.

#### Promoting a family-centred model of care

- Providing holistic, family-centred care that is responsive to the reality of people's lives and supportive of equal access, equality and cultural diversity;
- Having a written philosophy of care including statements on autonomy, diversity and equality and how this will be achieved, including women's reproductive rights and choices on maternity care;
- Offering a wide range of integrated services and activities including, but not limited to,

wellbeing, active birth workshops, baby massage groups, breastfeeding groups and new parent support groups. In deciding on such provision, consideration will be given to effective ways in which the birth centre can promote women's sense of wellbeing and agency in preparing for birth.

- Welcoming any potential service users, by offering information and support relating to pregnancy, birth and the postnatal period, as well as the opportunity to have a tour of the birth centre;
- Reinforcing an understanding that all care providers in the broader maternity care system
  would benefit from awareness of and training in a social model of care, recognising their
  impact on the experiences of women, families and overall quality of care.

# Topic 2: Working across Professional and Physical Boundaries

When stakeholders work in a collaborative manner to identify cultural or geographical barriers and prioritise cooperation to facilitate smooth, well-integrated, pathways of care, women and families benefit. This includes facilitating consultations with other professionals for women receiving midwife-led care, and transfer of care to the obstetric unit when this is required. For example, maternal and neonatal complications receive immediate stabilizing interventions then referred if necessary.

#### Standard 2: There is a shared written commitment to mutual respect and crossboundary working across the whole maternity service

#### The document includes statements on:

- Promoting ownership among maternity staff;
- Fostering open and positive multidisciplinary communication within the maternity unit and between all parts of the maternity system;
- Holding co-production reviews and planning sessions and celebration events.

# Standard 3: The birth centre has a linked lead midwife, a linked obstetrician and neonatologist within a linked health institution

- The linked lead from each professional discipline is consulted for key organisational and clinical decisions:
- The linked professionals provide support to the birth centre;
- The midwife who will make the risk assessment and determine the case low or high risk and therefore she will transfer the case to the obstetrician/physician.

### Eligibility criteria for low-risk women to give birth at the birth centre includes, but is not limited to:

- A cephalic presentation between 37+0 (259 days), and 42+0 (294 days) weeks of gestation.
- Age of woman is not less than 18 years and not above 40 years.
- Para 0-5 (excluding miscarriages and terminations).
- Women with spontaneous pregnancy.
- An uncomplicated Singleton pregnancy
- Body Mass Index (BMI) should be more than 18 and less than 40 on booking.
- Previous caesarean section but not more than twice.
- No obstetric or medical, foetal and/or neonatal condition precluding a safe labour, birth and postpartum period in a birth centre such as: Gestational Diabetes Mellitus requiring medication, Diabetes Mellitus, Hypertension, Pregnancy Induced Hypertension (PIH), and Deep Vein Thrombosis (DVT), cardiac disease, renal or liver disease. etc.

#### Standard 4: There is a clear policy and procedures for transfers

#### The policy and procedures for transfer include:

- Indications for transfer
- Ambulance services (if freestanding birth centre);
- Operational transfer procedures that promote the integration of services and seamless pathways for women transferring between birth centres and health institutions;
- Joint vision and strategic planning across primary and secondary care settings, and between adjoining secondary care services where appropriate.

#### Transfer to hospital

 Maternal and neonatal complications receive immediate stabilizing interventions then transfer if necessary.

#### Birth centre services should have two levels of transfer:

- Emergency care (level A): transfer within 10-15 minutes to the nearest hospital and must be level 2 hospital (see Appendix 3) that provides maternal and newborn care.
- **Urgent care (level B):** transfer within 20-30 minutes considering traffic to participating hospital. Direct referral of a woman or her infant to hospital care as a result for a high-risk problem that arose after the eligibility of the woman for birth center.

The following conditions preclude a woman from giving birth at birth centre and/or necessitate transfer to health institution/hospital:

#### Labour, birth and immediate postpartum (4 hours post birth) indications for transfer to hospital:

- changes from low risk to high risk for mother or baby, for example, maternal wellbeing temperature, blood pressure etc.
- preterm labour <37 weeks.</li>
- meconium-stained liquor grade III with non-reassuring foetal heart rate.
- cord prolapse.
- intrapartum haemorrhage.
- postpartum haemorrhage of one (1) Litre or greater.
- foetal heart rate abnormalities.
- retained or incomplete placenta.
- third or fourth-degree perineal tear.
- hypertension and/or pre-eclampsia/eclampsia.
- · thrombophlebitis or thromboembolism.
- uterine inversion or prolapse.
- acute urinary retention.
- maternal collapse.
- · large vulvar or paravaginal haematoma.
- epidural request.

#### Neonatal indications for transfer to hospital

- Apgar score < 7 at 5 minutes.</li>
- excessive bruising, abrasions, unusual pigmentation and/or lesions.
- excessive moulding and/or cephalohematoma.
- low birth weight (< 2500gms).</li>
- less than three vessels in umbilical cord.
- · neonatal convulsions.

- · congenital abnormalities.
- vomiting: projectile, excessive, bloody, uncharacteristic for newborn.
- abnormal findings on physical examination.
- birth injuries or trauma.
- · temperature instability

### **Topic 3: Staffing and Workload**

Standard 5: Essential staffing includes a staff team and midwifery leadership on site to promote high standards, a sense of ownership and an appropriate philosophy of care

Freestanding birth centre should be licensed from the MOH and the licence is under consultant midwife or consultant obstetrician.

#### There is a sufficient number of staff to ensure:

- A 24/7 service is available:
- 1-to-1 care and continuous presence in labour will be guaranteed;
- Safe care for mother and baby, including a clear, locally applied escalation policy which includes transfer to a hospital if required;
- Midwives providing care in the birth centre must transfer the woman when she wishes or needs to transfer the care to health institution care; it is optional for the midwife to stay with the woman or return back to the birth centre:
- Availability of support from a senior midwife (in person, by telephone, or on-call);
- Availability of a second midwife during the second stage of labour and present at birth;
- Assistance of midwives by an appropriate number of maternity support staff as part of the core team;
- Performance of the required examination of the newborn and discharge a well-baby.

Records are maintained for all employed, credentialed or contracted staff, trainees and volunteers participating in birth centre care including as applicable:

#### Qualifications of the midwife who will work in the birth centre as follow:

- o Technician Midwife (3 years' Associate Diploma): should have a minimum of 2 years' experience as a midwife in labour and birth/antenatal and postnatal ward with logbook competencies or letter certifying completed competencies from health institution.
- o Specialist/Senior Specialist/Consultant Midwife: should have a minimum of 1 year experience as a midwife in labour and birth/antenatal and postnatal ward with logbook competencies or letter certifying completed competencies from health institution.
- Current valid licensure and registration with SCFHS as a midwife;
- Health screening;
- Malpractice insurance coverage;
- Disclosure of malpractice claims;
- Evidence of current training in adult cardiopulmonary and neonatal resuscitation.

# Standard 6: Assessment of workload should include all activities on the birth centre, not just the intrapartum care and number of births

Midwifery staffing levels should be calculated and implemented according to birth setting and case mix categories to provide the midwife-to-woman standard ratio in labour (1.0–1.4 WTE midwives to woman). Women in established labour should receive one-to-one care from a midwife.

#### Care that the birth centre provides may include:

- Assessment by a midwife (ideally the named midwife or her team) by phone, at home, or at the birth centre when it is required by the woman for any need, both in pregnancy and in initial labour;
- Discharge from the birth centre;
- Breastfeeding support, examination of newborn, hearing, cardiac, metabolic screening etc.;
- Antenatal and postnatal appointments;
  - Tours of the birth centre;
  - Antenatal and postnatal groups;
  - Other groups / sessions / community-linked activities which midwives lead and /or participate in.

### **Topic 4: Policy, Procedure and Training Requirements**

# Standard 7: The birth centre has evidence-based guidelines, policies and procedures subject to regular review

- Guidelines and procedures are co-produced and agreed by a multidisciplinary team, including the hospital and emergency services;
- Transfer guidelines promote the integration of services and pathways for women and their babies transferring between birth centre and hospitals;
- There is a regular review between 1 to 3 years of the operational guidelines, policy and procedure;
- An escalation policy for staffing and clinical care is in place, which acknowledges the autonomy of staffing of the birth centre. Labour wards have their own on-call system for staffing to avoid 'pulling' midwives from the birth centre;
- There is a written risk-management policy and a system for auditing compliance;
- Maternal and neonatal guidelines and birth centre documents are based on evidencebased guidelines (including using international guidelines where appropriate).
- There are written human resource policy in place for employment and retaining of all staff, and to ensure that staff are safe, secure, and encouraged and supported to provide quality and evidence-based maternity care in a respectful and positive work environment.
- There is a system and policy for prevention of newborn, infant kidnapping and exchange and code pink.
- Clear guidelines for a supply of the birth medications, single-use sterile supply, equipment, disposing waste, sterilization of the equipment.

### Standard 8: The birth centre has a policy relating to respect, diversity and social inclusion

- Birth centres have an analysis of use by socio-economic status and nationality of service users and will assess this against local population analysis and review the extent to which it is serving the diverse population;
- Birth centres will periodically review the needs profile of its local population, in order to inform and align the services it offers with those needs;
- Before, and regularly after, the opening of a birth centre, managers and birth centre staff engage the local community and involve community leaders to understand population experiences and needs;
- The birth centre aims to maximise access to care with a specific focus on accessibility for women in vulnerable situations and improving timely and appropriate access to care;

- The birth centre has language and communication support available as required for people
  who have language and/or communication needs to ensure that they can understand
  information, be understood by staff and make fully informed decisions about their care, this
  can include cultural mediation;
- The structure of the birth centre respects minority rights and works in partnership with local networks which support socially disadvantaged families and children.

# Standard 9: The birth centre has a clear policy and procedures, training and skills required of midwives in place

The birth centre has a document in place detailing the policy and procedure, training and skills required of midwives to work in the birth centre include, but is not limited to:

- Comprehensive understanding of physiology and anatomy in relation to pregnancy, birth and the postnatal period;
- History and physical and risk assessment/reassessment of mothers and newborn recognising abnormalities;
- Antenatal and postnatal care including clinical pathways and not limited to perinatal mental health, Patient Health Questionnaire-9 (PHQ-9) in detecting perinatal depression, Venous Thromboembolism (VTE) prophylaxis in pregnancy and postpartum.
- Capacity to provide respectful care;
- Communication skills show the ability to deal with difficult interpersonal situations; (i.e., those involving self and others)
- · Communication and supportive techniques for physiological labour and birth;
- Decision-making skills in relation to initial assessment, ongoing assessment and decisions to recommend transfer to the health institution
- Understanding and application of evidence-based practice;
- · Reflective and reflexive skills
- Foetal Heart Rate (FHR) monitoring (Cardiotocography CTG, Doppler) assessment and interpretation of (CTG) the management of non-reassuring foetal heart rate;
- Use of water and water birth
- Labour position and comfort measures
- Obstetric emergencies in the birth centre including initial care, escalation and transfer;
- Maternal and Neonatal Life Support such as Basic Life Support (BLS), Neonatal Life Support (NLS) or Neonatal Resuscitation Program (NRP)
- Medication prescription for women and newborn (where available) and administration;
- Anti-D immunoglobulin for Rhesus D prophylaxis
- Intravenous (IV) cannulation (insertion, maintenance, discontinuing)
- Iron intravenous administration

- Phlebotomy
- Perineal trauma and suturing
- Monitoring mother and newborn's vital signs and knowledge of acceptable deviations from the norm
- Eligibility criteria guidance
- Ultrasound in pregnancy for level 1
- Vaginal examination during pregnancy and labour
- · Care of women during normal childbirth and conducting normal birth
- Investigations needed for women and newborn
- Early maternal warning signs
- Urinary catheters
- Infection control measures
- Patient falls (assessment of risk and methods to prevent falls)
- Midwifery role in cardiac/respiratory arrest
- Midwifery role in disaster, fire, and other emergencies
- Operation of blood sugar testing equipment
- Emergency measures for obstetric emergency cases such as eclampsia and pre-eclampsia
- Breastfeeding and lactation support
- Postpartum haemorrhage recognition and care
- Immediate newborn care
- Vaccination
- Health education for women and their families
- · Detection and reporting of risks, signs and symptoms of mother and child abuse/violence
- Pain assessment
- Metabolic screening test

# Standard 10: The birth centre has plans for education and continuing professional development

- Birth centre staff have dedicated time for training, team building and team meetings;
- Interdisciplinary training days include midwives, maternity care assistants, neonatologists, ambulance services and primary care physicians/general practitioners (with some of the study days to be located in the birth centre);
- Training for the whole interdisciplinary team including knowledge and skills on personalised care, women's autonomy, and physiological labour and birth;
- All staff are up to date with the most recent evidence and have communication skills to share this information with women:
- There are team meetings (at least monthly) to learn from each other and maintain a shared

- philosophy and vision of the birth centre;
- The organisation supports the achievement of accreditation frameworks, such as mother-baby family friendly initiative.
- Drills training (at least yearly) for midwives should include, but is not limited to:
  - how to support physiological birth;
  - communication skills;
  - partnership in decision-making and women's autonomy;
  - assessment of foetal wellbeing and intermittent auscultation;
  - obstetric emergencies in midwifery-led settings and skills for transfer;
  - postpartum care for mother and newborn
  - maternal and neonatal resuscitation.

#### Standard 11: The birth centre has a framework for preceptorship and orientation

- Maximise opportunities for different maternity care professionals and students to be
  exposed to normality, physiology and midwifery-led care so that the philosophy can be
  spread across the maternity service, whilst respecting the uniqueness of the moment and
  privacy of women;
- Each maternity care professional has an orientation in the birth centre to familiarise them with the environment, equipment and staff;
- The welcome pack and/or preceptorship booklet includes specific birth centre values and skills:
- All maternity care professionals and students have an opportunity for placement experience within a birth centre environment during their education.

### **Topic 5: Environment and Facilities**

#### Standard 12: The birth centre offers an environment that promotes a familycentred model of care and building relationships

- The philosophy of the birth centre should be communicated throughout its physical environment and all of the visual and written images, including pictures of waterbirth, breastfeeding babies, relaxing landscapes, use of colours, fabrics and textures etc.;
- The birth centre includes communal social spaces, such as an area where women can spend time together, service users and staff can use communal kitchen space etc.
- Nutritional supplies should be available to serve the staff, woman and her family.

### Standard 13: The birth centre offers an environment which supports mobilisation and active birth

- Birth rooms in the birth centre have space for the woman to mobilise freely during labour and birth, and the bed does not occupy a dominant position in the room;
- The room is configured to facilitate movement of furniture and equipment;
- Equipment is provided to support active birth: birth mats, bean bags, birthing balls, etc.;
- In every birth room, there is a hand washing station, a birthing pool and/or a large bath or shower;
- Access to external green space is provided if possible, to encourage women to walk about in natural environments during labour.

# Standard 14: The birth centre offers an environment that protects and promotes relaxation, privacy and dignity

- The birthing room allows for flexibility to regulate lights, filter external daylight, regulate colours and be adjusted to the personal preferences of the labouring woman;
- There is an area between the public space and the birthing rooms to protect privacy and ensure a quiet atmosphere. This can be achieved through the architecture of the room or, if necessary, using furniture;
- The windows in the birthing rooms and clinical consultation rooms need to allow for privacy, as well as creating a darker environment if needed.
- Natural light and views is essential and shall be available in all Birthing Rooms and is
  desirable in lounge areas and staff rooms. Windows are an important aspect of sensory
  orientation and psychological well-being of labouring women and staff.

# Standard 15: The physical layout and design of the birth centre conveys the family-centred philosophy of care model

- Consideration is given to the unit's location in relation to other services. Birth centres should be maintained as separate and independent physical spaces, with a separate entrance door, reception area, administrative office, consultation rooms and facilities such as kitchen and social space;
- The number of birthing rooms required can be calculated on the basis of the estimated yearly number of births (36% of births achievable as per Walsh et al., (2018), considering the full yearly capacity of one room to be between 100 to 150 births (maximum); minimum 3 rooms per birth centre.
- Women should be able to be accommodated in the same room for labour, birth and the postnatal stay, if they wish;
- If the mother wants to stay longer she can be transferred to a postnatal room where woman can stay until discharge.
- The birth centre follows infection control guidelines specific for the birth centre.

#### A birth centre shall include:

#### General:

- access control system for all entry points
- storage spaces (clean linen, supplies and equipment) e.g. to avoid clinical and other supplies and equipment being left on display and in communal areas;
- space for mechanical and electrical equipment and for maintenance of the equipment
- heating, ventilation and air conditioning (HVAC), electrical, plumbing, safety and related building systems shall meet (*i*HFG Part B and ASHRAE could be used as reference).
- the required minimum corridor width shall be according to the applicable building codes, but not less than 2.4 meters:
- doors within the birth centre must be appropriately positioned and sized. A minimum of 1.4 meters clear opening is recommended for doors requiring bed/trolley access to accommodate ambulant services;
- flooring surfaces, including those on stairways, shall be stable, firm, and slip-resistant
- systems in place for the disposal of hazardous disposal of waste (i.e. medication inventory, sharps management, expired medications
- clean work area or clean workroom shall be separate from and have no direct connection with soiled workrooms or soiled holding rooms
- spatial arrangements for disposal of domestic waste and soiled linen
- medication room (respecting safety zone)
- laboratory services

- housekeeping room
- smoking is prohibited inside and around the birth centre according the MOH law
- emergency-powered lighting with documented regular checks of functioning
- adequate security measures for staff and families and has appropriate disaster plans
- hazards, fire prevention and response measures are in place that follow policy of general directorate of civil defence, Ministry of Interior, Saudi Arabia
- multipurpose room, depending on the nature of the services offered, a space for antenatal and postnatal groups and classes (e.g. breastfeeding courses, active birth workshops, antenatal education), baby massage, training etc. and should be equipped for use of audio visual aids
- equipment to provide ice for treatments and nourishment
- consultation rooms for antenatal and postnatal care
- area/store for delivery of goods and services
- equipment for obstetric emergencies and neonatal resuscitation that is regularly maintained and ideally hidden from sight
- furniture that facilitates cleaning and conforms with infection control guidelines specific for the birth centre;
- 2 waiting area seats and 1 wheelchair waiting space per birth room;
- birthing sounds must not be audible outside confines of space;
- temperature control within the room for mother and baby';
- nutrition area
- triage room
- equipment room to have all equipment
- central sterile services department (CSSD)
- communication and server area
- uninterruptable power supply (UPS) area
- medical record area
- medical gas area
- suction motor area

#### Staff

- work area(s) with counters and space for storage shall be provided,
- support areas including
  - lounge facilities
  - toilet room
  - changing areas shall contain showers, toilets, hand-washing stations, space for wearing and changing scrub suits and boots, securable locker closets, and/or cabinet compartments shall be provided for the personal articles of staff.

#### The birth room shall include:

- a double bed for labour, birth and postnatal rest, and a sofa bed which allows partners or companions to stay and be comfortable overnight;
- · an en-suite bathroom with shower;
- a birthing pool wherever possible;
- · emergency and clinical equipment that is stored away when not needed;
- neonatal resuscitation equipment in the room (not visible) or portable resuscitator stored outside the room;
- adequate equipment which could facilitate suturing when needed (stored when not in use).

#### **Birthing rooms shall:**

- be located out of the path of unrelated traffic and under direct supervision of the birth centre staff
- have an average minimum clear floor area of 325 square feet (30.19 square meters), including the newborn care area.
- have an average minimum clear dimension of 15 feet (4.57 square meters).
- provide lighting capable of providing at least 70 foot-candles in the birth and newborn care area with a combination of fixed and portable lighting.
- have oxygen and vacuum system.

#### Standard 16: The birth centre is visible and accessible in the community

- The birth centre is easily visible and accessible to the public, through a clear descriptive name and signage, clear signs to indicate the easiest way to access the birth centre, car parking facilities for staff and women using the facilities, and links to public transport;
- The birth centre is easily accessible and has the appropriate facilities to facilitate prompt transfer to a health institution when needed or in case of emergencies.
- The distance between the Standalone birth centre and any health institution should be not more than 30 minutes.

### **Topic 6: Leadership**

#### Standard 17: There is a visible and consistent leadership within the birth centre

- There is a continuous presence of a clinical leader responsible for providing support to less experienced staff;
- There is a lead midwife at operational level for the birth centre. This person is responsible
  for the philosophy of the unit, staffing, quality and safety, ensuring provision of equipment
  and materials, safety governance and infection control standards, clinical audit, finance,
  marketing, as well as the overall smooth running;
- There is a strategic role responsible for making decisions about resources and policies and acting as an advocate for the birth centre. This person is:
  - visible on the birth centre, retains involvement in 'everyday' clinical practice;
  - able to support staff through hands on clinical practice;
  - able to share expertise (including plans for out-of-guidelines, on-calls etc).

#### Standard 18: The birth centre has high-quality transformational leadership

#### Leaders on all levels should have the following requisites:

- Relevant clinical experience of working in labour and birth room or birth centres if possible;
- Ability to articulate a strong vision for the birth centre;
- Willing and demonstrable commitment to the role and sustainability of the birth centre;
- Knowledge aware of relevant evidence and competencies;
- Positive and inclusive leadership style and approachability;
- Ability to advocate for the birth centre and its staff team;
- Supportive of women's choice;
- Professional approach and an ability to provide role modelling for service staff;
- Ability to establish good working relationships between senior staff and between professional groups;
- Shared decision-making with the team;
- Ability to respond in a timely and clinically appropriate manner to critical incidents.

### Standard 19: There is a multidisciplinary and service users' advisory group, which sets out a vision for the birth centre

- The advisory group is composed of service users who are representative of the local population, birth centre staff including leader of birth centre and midwives, other clinicians, ambulance services and commissioners. The aim of this group is to enable community engagement and involvement, facilitate co-production with service providers, and support a culture of accountability to the public;
- The advisory group needs to be established while planning the opening of a new birth centre;
- The advisory group meets at least quarterly, to be reported to, and to advise on, place of birth bookings and transfer trends, information provided to expectant parents, marketing, relationships with related services and specialties, staff and unit development, service user feedback etc. Other activities and outputs may include: an annual report, multidisciplinary clinical reviews to include best practice cases, clinical and transfer audits, yearly showcase day to the local community.

### **Topic 7: Clinical Governance**

# Standard 20: The birth centre commits to a philosophy of providing information as early as possible, and keeping decisions open

A woman's pathway may include a consultation with a more senior professional to discuss the woman's specific situation and consider her options. The subsequent plan of care will be developed in partnership with the woman and taking into consideration the evidence-based advice of the clinician. This plan is continuously reviewed and rediscussed during the woman's maternity care journey.

- Evidence-based information about pathways of care and place of birth is available at the commencement of antenatal care and thereafter;
- Women and their partners have equal access to information about Birth Centre and pathways of care regardless of sociocultural and clinical factors;
- All members of the multidisciplinary team should provide consistent, unbiased, evidencebased information about place of birth and pathways of care, which is respectful and recognises a woman's autonomy.
- All women and babies using the birth centre have access to supportive antenatal and postnatal services including proactive support with physical changes, emotional changes

- and infant feeding, as well as, newborn examination, metabolic, cardiac, hearing screening tests, and physician' review etc.
- There is a mechanism for antenatal and postnatal home visits as part of routine care

### Standard 21: The birth centre pathway is open to all women for personalised and individualised care

- Every birth centre has a local evidence-based guideline for women's suitability for midwifery led care (e.g. NICE, 2014);
- Every birth centre has the possibility to offer each woman a personalised care plan appointment to discuss her wishes, in case of pregnancy complexities (e.g. birth options clinic).
- During such an appointment, the woman can discuss her options with a consultant obstetrician and midwife who will discuss and agree a care plan in partnership with the woman.
- There is a personalised care plan and named professional responsible for each woman and baby's care.

#### Standard 22: The birth centre has specific referral pathways

- For the indications and the process of transfer to a hospital (labour and birth room or neonatal unit) (with a clear statement of acknowledgement of a woman's autonomy);
- For local health and social care;
- Specific protocols for multi-disciplinary and inter-agency referrals;
- Referrals to primary care, family physicians or general practitioners.

# Standard 23: The birth centre has a policy acknowledging midwives' autonomy and accountability

#### The birth centre policy includes:

- A clear statement acknowledging midwives' professional scope and autonomy of practice in caring for healthy mothers and babies;
- A clear statement regarding midwives' obligation and capacity to provide personalised care;
- A support structure for midwives (and the interdisciplinary team) providing advice and care
  for women who request to give birth in a birth centre but present some clinical complexity,
  such as care that is 'outside local guidelines');
  - adequate time for midwives and senior midwives to be able to discuss care preferences and options with women;
  - a senior midwife or senior member of staff on call for clinical and professional advice;

- a system for documentation of discussion with the woman, evidence-informed clinical advice given and her decision in her maternity notes.

### Standard 24: The birth centre has a policy acknowledging women's autonomy

#### The birth centre policy:

- Avoids a rigid separation of low-risk/high-risk women and promotes personalised assessment and holistic care;
- Provides for systems that ensure the support of women opting for care in birth centres regardless of complexity of pregnancy; after a care plan has been agreed with the midwife and consultant obstetrician.
- Includes a clear statement acknowledging and encouraging women's autonomy in decision-making, having been given adequate information to make informed decisions about their care;
- Includes arrangements to capture feedback from women and partners, including positive experiences, complaints, accounts of transfers, and personal impact statements and recommendations for when things go wrong.

# Standard 25: The birth centre has guidance on eligibility criteria and choice of place of birth

- Agreed threshold characteristics that would trigger discussion between the women, the birth centre staff, and linked obstetric staff to determine the optimal plan of care and the chosen place of birth;
- Where there is both a freestanding birth centre and an alongside birth centre, the policy states whether there are differences in the threshold characteristics for care in the different birth centres.

# Standard 26: The birth centre demonstrates commitment towards continuous improvement

#### The birth centre promotes continuous improvement of the service by:

- A monitored complaints procedure for both staff and service users;
- Routine collection and monitoring of staff and service user feedback;
- Continuous improvement processes drawing on clinical outcomes and the experiences of service users and staff;
- Rapid dissemination of learning from incident reviews;
- Dedicated professional time for audit;
- Continuous audit which includes, but is not limited to:
  - number of women booking;
  - number of births;
  - outcomes such as perineal trauma;
  - transfers:
  - sentinel events
    - Neonatal Apgar <7 at 5 minutes
    - Postpartum haemorrhage of >1000cc
    - Birth weight <2500gm or >4500gm
    - Shoulder dystocia
    - Emergent transfers of mother or newborn
    - Neonatal intensive care unit admissions
    - Maternal intensive care unit admissions
    - Maternal, foetal or neonatal mortality
    - Deviations from written protocols
- Four to six-monthly presentation of audit to the whole birth centre.
- The birth centre collects data in line with what is suggested by national programmes with particular regard to improving public health and reducing health inequalities around:
  - Increasing physiological births;
  - Reducing unnecessary interventions (e.g. caesarean sections, Vaginal Birth After Caesarean section (VBAC));
  - Reducing maternal and infant morbidity (including both physical and mental health outcomes);
  - Improving early access to care (e.g. antenatal care booking, postpartum care);
  - Increasing breastfeeding;
  - Smoking cessation, maternal nutrition, substance misuse and alcohol abuse;
  - Supporting women in vulnerable situations.

#### Standard 27: The birth centre has a robust information system

The birth centre has a robust information system which is in line with the Saudi Arabia regulations on data protection and storage at operational, managerial, and strategic levels that ensures:

- Record keeping and storage of data that is rigorous, contemporaneous and subject to regular audit;
- Robust information systems and data collection tools facilitating reporting and auditing of activities and outcomes;
- Primary and secondary care providers share the same information system;
- Electronic collection of information regarding activities and outcomes of care;
- A system to report incidents and demonstrate a transparent investigation and resolution of any incidents;
- Electronic records are accessible across geographical boundaries with regular statistics made available to the public.

# Standard 28: The birth centre shall include plans for communication and marketing

- Promotion and links with the community such as:
  - regular staff newsletters reporting on activities, outcomes, incidents, positive stories and celebrating successes;
  - regular public newsletters which include information about the services available on the birth centre, recent stories and experiences.
- Information and education for women through:
  - availability of regular tours;
  - use of social media to promote the birth centre;
  - antenatal/postnatal education and preparation or birth.
- Marketing of the birth centre through:
  - systems to facilitate word-of-mouth marketing within the community;
  - opportunities for families to learn about the birth centre during pregnancy (for example through using the birth centre as a venue for groups and classes and antenatal appointments).
- The birth centre should have a marketing strategy in place that considers the four stages
  of decision-making that considers theories of decision-making, such as the four-stages of
  decision-making model (AIDA) Awareness, Interest, Desire and Action (Priyanka, 2013) to
  ensure that local women's choices are supported.
- Fundraising activities provide opportunities for the birth centre to raise awareness in the community and involve them in the birth centre activities, increase ownership of the birth centre amongst service users and staff, generate income which could be used for different purposes such as events, training, conferences, equipment etc.

### **Appendix 1: Birth Centre Design**

	AREA	M²	REMARKS
1	2 Accommodation rooms for the guard or relatives with electricity, desk, chair, tap and toilet, sink	± 12 m <sup>2</sup>	Next to main entrance Waiting shelter for pregnant women who attend the birth centre to wait for their birth
2	Main entrance and hall with a reception desk with daylight		Containing room for wheelchair and stretcher
3	A waiting room for families and children with daylight this should have access into a kitchen or a little cafe 'space	± 40 m <sup>2</sup>	Containing a tap and a toilet for men and women. Besides chairs, possibly a large table and a play corner for the children With windows TV screen for Public Health information and education with prayer space
4	1 Examination room (multifunctional)	± 20 m²	With tap – sink and toilet for check of patient on admission; or for a patient with complaints. For a postnatal check. For Family Planning. A mobile ultrasound device. Gynaecological chair; examination light
5	2-3 Consulting rooms for antenatal care	each ± 20 m²	Each with tap, sink – etc. (toilet and playing corner for children). The examination table behind a screen or curtain; Desk with a computer and 3-4 chairs. Cupboards for disposable materials and equipment for taking blood samples.  One consulting room can be used as an ultrasound room.
6	An office for midwives – assistants – students	± 12-16 m <sup>2</sup>	With tap, lockable cupboards for storage of medicines; emergency trolley; with window; EAD Toilet and shower for midwives
7	Multi-functional place which can be used for:     Information meetings regarding maternity care and public health related subjects.     Vaccinations     Education meetings for student midwives     Skills – drill trainings     Antenatal classes     Other meetings	± 60-80 m²	Containing some lockable cupboards for educational equipment like many kind – pelvis models etc. Extra plug connections for computers – beamers with windows

	AREA	M²	REMARKS
8	1 Kitchen where employees can make tea or coffee and something warm both for themselves and for the clients	± 16-24 m2	Containing kitchen counter and fridge.
9	3 labour rooms: taking into account the future amount of clients (till that time multifunctional, eg can be used as pre-labour room for a woman who is not in labour and need some sleep).  Minimum 3 labour room with at least one room with a pool	Each	Each room containing a toilet and shower with warm water. In the labour room a tap and sink. In each room: a birth bed, possibility of multiple positions (leg support is not a condition); bedside table; at least 3 chairs or one couch (for a personal "doula" and 1 student); 1 relax chair (inflatable pool. birth chair); baby chest of drawers; lockable cupboard; With windows; screen. Equipment as an Ambu, O2 etc. Cupboards for disposables and linen
10	1 baby room for resuscitation of neonates (or integrated in labour ward)	± 9-12 m2	This room contains sink, resuscitation table and an incubator
11	1 washroom with sink for disposal of linen – urine -feces – placenta and blood	± 12-16 m2	Tap, sink, buckets etc. for cleaning and disinfection, Cupboard and shelves for storage Freezer for the placenta's Equipment to clean chamber pot (if used)?
12	1 Store room	± 20-24 m2	for storage of equipment; materials; autoclave; disposables; some lockable cupboards; shelves; spare matrasses; wheel chair; birth chair etc.
13	1 Post-natal room	± 30-40 m2	with double bed: clients can stay here until discharge with windows; tap and sink; screen With shower and toilet and sofa and baby cot
14	2 Bedrooms for midwives and students	each ± 16-20 m2	with beds, shower, toilet, cupboard window
15	Garden		Include Playground for children Walking path

### **Glossary**

#### A midwifery-led birth centre:

is a location offering maternity care to healthy women with straightforward pregnancies in which midwives take primary professional responsibility for care. Birth centre may be located away from (Freestanding) or adjacent to (Alongside) a hospital. Modified from: Rowe, R. and the Birthplace in England Collaborative group, 2011

#### Alongside Birth Centre (ABC):

during labour and birth, medical diagnostic and treatment services, including obstetric, neonatal and anaesthetic care are available to women in a different part of the same building, or in a separate building on the same site. This may include access to interventions that can be carried out by midwives, for example electronic foetal heart monitoring. To access such services, women will need to transfer to the obstetric unit, which will normally be by trolley, bed or wheelchair.

#### Freestanding Birth Centre (FBC):

medical diagnostic and treatment services and interventions are not available in the same building or on the same site. Access is available as part of an integrated service, but transfer will normally involve a journey by ambulance or car.

#### Clearance:

The required minimum distance between a specified object (e.g the patient bed or exam table) and any fixed or immovable element of the environment. Note: Movable equipment and furniture that do not interfere with functions or could be easily moved out of the way are not used to calculate minimum clearance.

**Clear dimension**: An unobstructed room dimension exclusive of built-in casework and equipment and available for function use.

#### Clear floor area:

The floor area of a defined space that is available for function use excluding toilet rooms, closets, lockers, wardrobes, alcoves, vestibules, anterooms, and auxiliary work area. Note: Door swings and floor space below sinks, counters, cabinets, modular units or other wall hung equipment that is mounted to provide usable floor space count toward "clear floor area". Space taken up by minor fixed encroachments that do not interfere with room functions can be included in calculating clear floor area.

#### Water pools:

may be a fixed item or removable and will need to be installed to manufacturer's specifications.

Additional considerations include:

- Provision of non-slip surfaces to the area
- Provision of grab rails for women
- Provision of conveniently located emergency call and women/midwife call buttons
- · Provision of medical gases including nitrous oxide and oxygen used for pain relief to the pool area
- Provision of sufficient space to enable a women lifter and staff to access the pool in the event of a woman needing to be lifted out of the pool
- Ongoing cleaning and disinfection of the pool.
- Temperature control setting.
- Access must be available from three sides for ease evacuation

#### References

Commission for the accreditation of birth centers (2021) Available at: https://birthcenteraccreditation. org/ accessed July 12, 2021

Guidelines for Design and Construction of Health Care Facilities; The Facility Guidelines Institute, Freestanding Birth Centres, 2014 Edition http://www.fgiguidelines.org/

MATES-iN (2021) Available at: https://mates-in.com/ accessed July 12, 2021

Midwifery Unit Standards developed by City, University of London and this work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0) available at https://researchcentres.city.ac.uk/maternal-and-child-health#unit=research-tools accessed July 12, 2021

Ministry of Health (MOH) (2017) Model of Care: Pathway Manual Women and Children.

Ministry of Health (MOH) (2019) Guidebook for Midwives. Riyadh, Saudi Arabia: [online]. Available at: https://www.moh.gov.sa/Documents/Book-2019-04-24-001.pdf accessed July 12, 2021

National Institute for Health and Care Excellence (NICE) (2014) Intrapartum care for healthy women and babies, Clinical guideline [CG190]. Available at: https://www.nice.org.uk/guidance/cg190 accessed July 12, 2021

Priyanka, R., "AIDA Marketing Communication Model: Stimulating a purchase decision in the minds of the consumers through a linear progression of steps," International Journal of Multidisciplinary Research in Social Management, Vol. 1, 2013, pp 37-44.

Rocca-Ihenacho L., Batinelli L., Thaels E., Rayment J., Newburn M., McCourt C. City, University of London; London: 2018. Midwifery Unit Standards. Available at: https://www.midwiferyunitnetwork.org/mu-standards/accessed July 12, 2021

Stewart, M., McCandlish, R., Henderson, J., & Brocklehurst, P. (2005). Review of evidence about clinical, psychosocial and economic outcomes for women with straightforward pregnancies who plan to give birth in a midwife-led birth centre, and outcomes for their babies. Updated July: Report of a structured review of birth centre outcomes.

The American Association of Birth Centers (AABC) (2017) National Standards for Birth Centers https://cdn.ymaws.com/www.birthcenters.org/resource/resmgr/AABC-STANDARDS-RV2017.pdf accessed July 12, 2021

UNICEF (2017) Guide to the UNICEF UK Baby Friendly Initiative Standards. Available at: https://www.unicef.org.uk/babyfriendly/wp-content/uploads/sites/2/2014/02/Guide-to-the-Unicef-UK-Baby-Friendly-Initiative-Standards.pdf accessed July 12, 2021

United Nations Population Fund, World Health Organization, International Confederation of Midwives (2021) State of the world's midwifery: a universal pathway. A woman's right to health. New York: United Nations Population Fund Available at:

https://www.unfpa.org/sites/default/files/pub-pdf/21-038-UNFPA-SoWMy2021-Report-ENv4302\_0.pdf accessed Oct 10, 2021

Walsh, D., Spiby, H., Grigg, C. P., Dodwell, M., McCourt, C., Culley, L., Bishop, S., Wilkinson, J., Coleby, D., Pacanowski, L. and Thornton, J. (2018) Mapping midwifery and obstetric units in England. Midwifery, 56, pp.9-16

