University Hospitals Sussex
NHS Foundation Trust

Please note, IF DOCUMENT IS PRINTED, IT MAY BECOME OUT OF DATE

TRUST CLINICAL GUIDELINE

Shoulder Dystocia

Overview

This clinical policy is written to support all staff, including obstetricians, midwives, midwifery support workers and paediatricians who are involved in cases of shoulder dystocia. Providing evidence-based guidance on the prevention, prediction and treatment of shoulder dystocia (SD) and to ensure rapid, efficient and consistent care for mothers and birthing parents, in addition to optimising outcomes for the baby when shoulder dystocia is diagnosed.

Owner	S. Adamson
Author/further information	C. Madziwa B. Middleton, Obstetric Consultant
Guideline version	v1.0
Related policies	None
Related protocols/procedures	**SRH&WH:** Neonatal Resuscitation, Postnatal Care **PRH&RSCH:** Care of the Newborn, Neonatal Resuscitation, Postnatal Care **UH Sussex maternity:** Admission to TS, SCBU or NNU
Standards	PROMPT Maternity Foundation RCOG: Shoulder Dystocia Green top Guideline No. 42. Maternity Incentive Scheme - NHS Resolution
Superseded documents	**SRH&WH:** CG1149 Shoulder Dystocia **PRH&RSCH:** MP048 Shoulder Dystocia

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JOGG	Date approved	19/03/2025
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Consultation		
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Ratification		
Clinical Document Approval Group	Date approved	28/04/2025

Contents

Shoulder Dystocia

1.0 Introduction

Shoulder dystocia (SD) is defined as vaginal cephalic birth that requires additional obstetric manoeuvres to release the baby's shoulders after gentle downward traction has been unsuccessful. It occurs when either the anterior or, less commonly, the posterior shoulder of the baby impacts on the maternal or birthing parent's symphysis or sacral promontory.

The incidence of SD is wide in variation but occurs in approximately 0.6% of all vaginal births in UK and North America.

Perinatal mortality and morbidity is high in cases of shoulder dystocia, even with appropriate management. Hypoxia and brachial plexus injuries (BPI) occur in 2.3% -16% of shoulder dystocia cases with <10% permanent disability (0.1 - 0.2 per 1000 live births). Not all brachial plexus injuries are associated with excessive traction, as maternal or birthing parent propulsive force can also contribute. BPI can also occur outside of shoulder dystocia. Nevertheless, BPI from shoulder dystocia is a common cause of litigation in maternity services.

Maternal or birthing parent morbidity risks from SD include postpartum haemorrhage (11%) and maternal or birthing parent trauma including fourth-degree perineal tears (3.8%). Risk of incidence is unchanged by the manoeuvres required to effect birth of the baby.

2.0 Scope

This guideline applies to:

- Midwives
- Obstetricians
- Paediatricians
- Maternity support workers (MSWs)

3.0 Responsibilities

Midwives, obstetricians, paediatricians and MSWs:

- To access, read, understand and follow this guidance.
- To use their professional judgement in application of this guideline.

Management:

- To ensure the guideline is reviewed as required in line with Trust and National recommendations.
- To ensure the guideline is accessible to all relevant staff.

4.0 Definitions and abbreviations used within this guideline

BPI Brachial plexus injuries	**EFW** Estimated fetal weight
IOL Induction of labour	**Kgs** Kilograms
MSWs Maternity Support Workers	**PROMPT** Practical Obstetric Multi-Professional Training
PTP Perinatal training programme	**RCM** Royal College of Midwives
RCOG Royal College of Obstetricians and Gynaecologists	**SD** Shoulder Dystocia

5.0 Prediction and prevention

Shoulder dystocia is a largely unpredictable and unpreventable event. Few shoulder dystocia cases can be anticipated and prevented, as most occur in the absence or risk factors. 48% of births complicated by shoulder dystocia are in infants weighing <4000g.

There are certain risk factors which increase the likelihood of SD (see below). In instances where an SD is anticipated due to risk factors:

- Key personnel should be alerted prior to birth.
- The mother or birthing parent and their partner/family can be informed about the steps that may be taken in the event of a difficult birth.

There is **no** evidence that the use of McRoberts manoeuvre before birth of the fetal head prevents shoulder dystocia, therefore, prophylactic use of McRoberts positioning prior to birth of the fetal head is **not** recommended.

6.0 Risk factors

Risk factors associated with shoulder dystocia	
Pre-labour	**Intrapartum**
• Previous shoulder dystocia • Fetal Macrosomia> 4.5 kgs • Diabetes Mellitus • Maternal and birthing parent Body Mass Index >30 kgs/m^2 • Induction of labour	• Prolonged first stage of labour • Secondary Arrest • Prolonged second stage of labour • Oxytocin augmentation • Assisted Vaginal Birth

7.0 Antenatal management of previous shoulder dystocia

For women and birthing people reporting shoulder dystocia in a previous pregnancy, the birth records should be requested and reviewed by the consultant obstetrician to ascertain the degree of

the dystocia. The rate of shoulder dystocia in women and birthing people who have had previous shoulder dystocia has been reported to be 10 times higher than in the general population; with a reported recurrence rate of between 1% and 25%.

There is no requirement to advise elective caesarean birth or induction of labour (IOL) routinely but factors such as the severity of any previous neonatal or maternal injury, fetal size, and maternal or birthing parent choice should all be considered when offering recommendations for the next birth.

Induction of labour at term can reduce the incidence of shoulder dystocia in women and birthing people with gestational diabetes. Induction does not prevent shoulder dystocia in non-diabetic women and birthing people with a suspected macrosomic fetus.

Elective caesarean birth should be considered to reduce the potential morbidity for pregnancies complicated by pre-existing or gestational diabetes, regardless of treatment, with an EFW of >4.5kg.

For women and birthing people who choose vaginal birth following a previous shoulder dystocia, a discussion should take place in the antenatal period, regarding the risk of recurrence and management plans for labour and birth.

8.0 Intrapartum management of shoulder dystocia

9.0 Diagnosis of shoulder dystocia

Shoulder dystocia is a subjective clinical diagnosis, and its timely management requires prompt recognition. Routine traction in an axial direction (i.e. traction in line with the fetal spine without lateral deviation) may be employed to diagnose shoulder dystocia.

Indicators of SD include:

- Difficulty with birth of the face and chin.
- The head remaining tightly applied to the vulva or even retracting (‘turtle sign’).
- Failure of restitution of the fetal head.
- Failure to deliver the head using routine axial traction with the contraction following birth of the head.

Allow a further contraction after the birth of the fetal head before diagnosing shoulder dystocia. Waiting and allowing a further contraction allows the full mechanics of labour to take place, giving time for shoulder restitution.

10.0 Emergency management of shoulder dystocia

In high-risk cases where shoulder dystocia is anticipated, an experienced obstetrician should be available on the labour ward for the second stage of labour. However, it is recognised that not all cases can be anticipated and therefore all birth attendants should be conversant with the techniques required to facilitate births complicated by shoulder dystocia.

Before any manoeuvres are attempted an explanation of the problem must be communicated to the mother or birthing parent and their partner. The co-operation of both will be needed to facilitate a successful outcome. Where possible, a member of staff should be allocated to stand beside the woman or birthing parent and their partner to explain and discuss what is happening.

Maternal or birthing parent pushing should be discouraged to prevent further impaction of the shoulders.

Shoulder dystocia should be managed systematically. Speed is required to reduce hypoxic acidosis and care to minimise trauma to the baby. Pulling the fetus in a lateral or downward traction is more likely to cause brachial plexus injury and therefore must be avoided.

RCOG (2012) Green top guidance and the PROMPT annual update (2021) advise the use of algorithms to support the management on shoulder dystocia (see appendix 1).

A scribe should be appointed to complete details on the shoulder dystocia proforma (see appendix 2) as they occur. This should be scanned into BadgerNet Maternity once completed.

11.0 Persistent failure of first and second-line manoeuvres

Several third-line methods have been described for those cases resistant to all simple measures but should only be attempted by appropriately trained staff to avoid unnecessary maternal or birthing parent morbidity and mortality.

- Cleidotomy: Bending/fracture of the clavicle with a finger or surgical division.
- Symphysiotomy: Dividing the anterior fibres of the symphyseal ligament.
- Zavanelli manoeuvre: Cephalic replacement and birth by caesarean birth.

12.0 Post birth management

After the birth, birth attendants should be alert to the increased possibility of:

- Postpartum haemorrhage (11%)
- Third or fourth-degree perineal tears (3.8%).
- The need for neonatal resuscitation
- Fetal injury (brachial plexus injury, fractures, pneumothoracies and hypoxic brain damage)
- The need for formal debrief of the woman or birthing person, their family and staff.

13.0 Paediatric management

If shoulder dystocia is suspected the paediatric team (SHO and Registrar) to attend the birth.

Where there is actual or suspected brachial plexus injury, or any other injury to the newborn following shoulder dystocia, the on-call paediatrician should be notified and asked to review at the

earliest opportunity. This review should be documented in the baby record on BadgerNet Maternity.

The baby should be examined for injury after birth by a neonatal clinician.

14.0 Follow up

Women and birthing people who have experienced a birth complicated by shoulder dystocia are often traumatised by the event. This is often more common when the baby has suffered serious morbidity or even mortality or if the mother and birthing parent had major complications after the shoulder dystocia. However, this can also occur when there has been no significant complication to the mother or birthing parent, or their baby and may only become evident in a subsequent pregnancy. All women and birthing people should be offered follow up/counselling referral if appropriate. For women and birthing people living in West Sussex, staff can signpost them to the Time to Talk service – link here.

All women and people who have had a significant shoulder dystocia should be offered a follow up appointment with the consultant obstetrician postnatally and the impact on subsequent pregnancies should be discussed including risk of recurrence and mode of birth. This follow up with the consultant obstetrician should take place 6-8 weeks following birth. The 6-week routine postnatal check should be with the GP as usual.

15.0 Training

Training for all birth attendants in the management of shoulder dystocia is recommended by the Royal College of Midwives (RCM) and Royal College of Obstetricians and Gynaecologists (RCOG).

Mandatory multi-disciplinary training in management of shoulder dystocia is required for clinicians on an annual basis. Details of staff training are evidenced in the UH Sussex Maternity Education Strategy .

K2MS Perinatal Training Programme (PTP) is available to all obstetric doctors and midwives within the trust maternity department and provides a training and assessment package for shoulder dystocia for staff to complete annually.

PROMPT (PRactical Obstetric Multiprofessional Training) is a simple practical aid to training. See appendix 1.

16.0 Record keeping and reporting

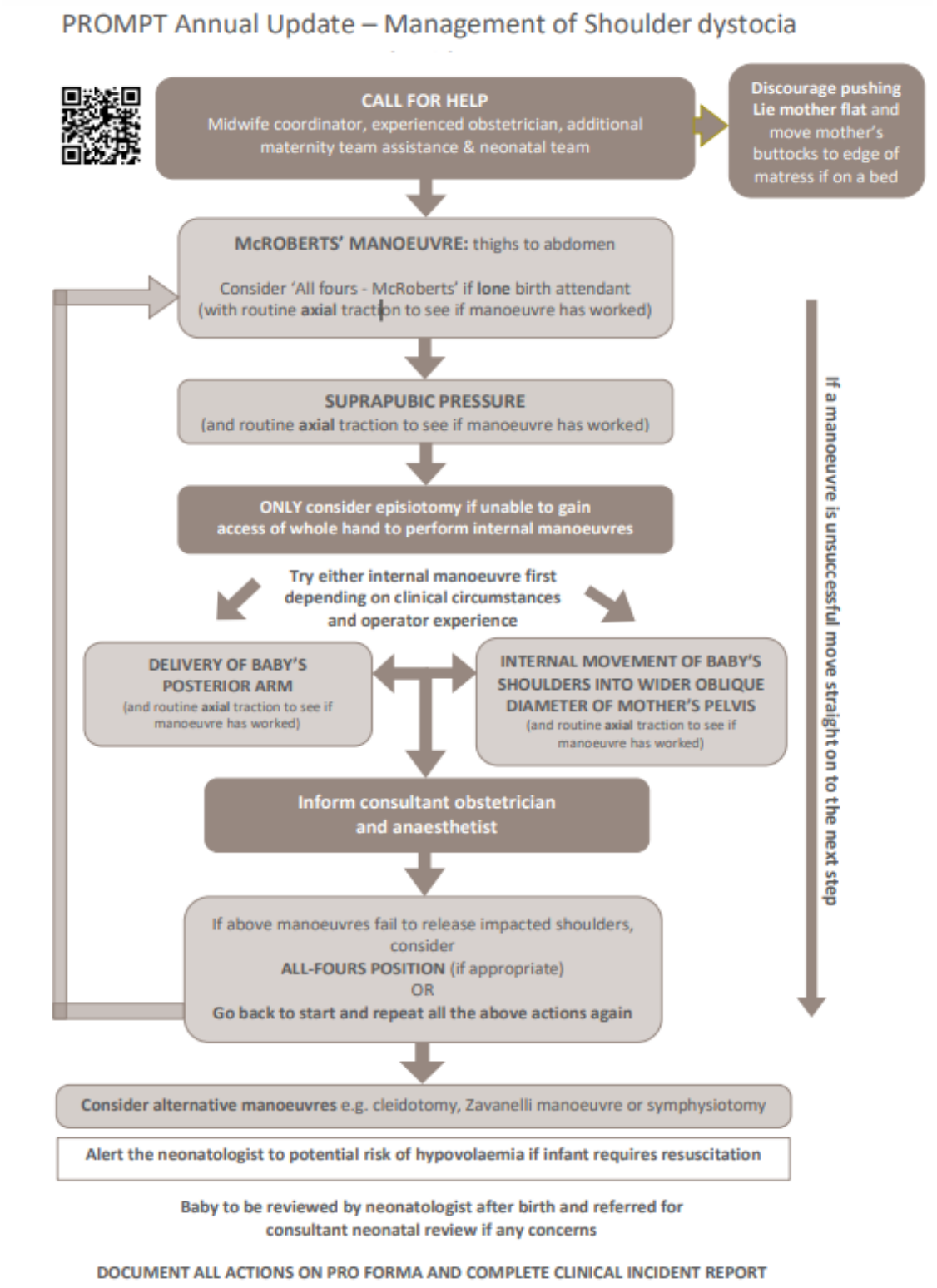
The shoulder dystocia proforma must be used to aid accurate record keeping. This is scanned into BadgerNet Maternity if not completed electronically at the time. Any additional details from the birth should also be documented in the labour care record on BadgerNet Maternity.

A patient safety incident reporting form (Datix) must be completed for all cases of shoulder dystocia.

17.0 Monitoring

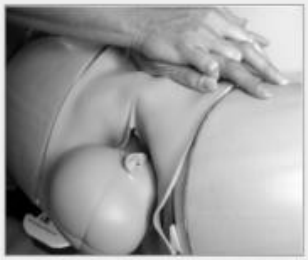
Issue being monitored	Monitoring method	Responsibility	Frequency	Reviewed by and actions arising followed up by
Cases of shoulder dystocia	Review of case records through Datix reporting	Patient Safety Midwives, Clinical Governance Team	Ongoing case review	Patient Safety Midwives, Clinical Governance Team

Appendix 1: PROMPT management of shoulder dystocia



Management of Shoulder Dystocia

1. Lie flat and hold legs in McRoberts



2. Supra-pubic pressure from side of baby's back

3. For internal manoeuvres insert whole hand

CALL FOR HELP
Midwife coordinator, experienced obstetrician, additional maternity team assistance, neonatal team

Discourage pushing
Lie flat and move mother's buttocks to edge of matress if on a bed

McROBERTS' MANOEUVRE: thighs to abdomen

Consider 'All fours - McRoberts' if **lone** birth attendant (with routine **axial** traction)

SUPRAPUBIC PRESSURE
(and routine **axial** traction)

ONLY consider episiotomy if unable to gain access of whole hand

Try either manoeuvre first depending on clinical circumstances and operator experience

DELIVER POSTERIOR ARM

INTERNAL ROTATIONAL MANOEUVRES

Inform consultant obstetrician and anaesthetist

If above manoeuvres fail to release impacted shoulders, consider
ALL-FOURS POSITION (if appropriate)
OR
Repeat all the above again

Consider cleidotomy, Zavanelli manoeuvre or symphysiotomy

Baby to be reviewed by midwife/neonatologist after birth and referred for consultant neonatal review if any concerns

DOCUMENT ALL ACTIONS ON PRO FORMA AND COMPLETE CLINICAL INCIDENT REPORTING FORM

After each manoeuvre apply *gentle, routine axial* traction to the baby's head to feel if the shoulders have been released (avoid downward traction). If the shoulders remain trapped, *do not keep pulling*, move on to the next step

4. Reach for posterior arm

5. Grasp wrist of posterior hand and deliver arm in straight line

6. Internal rotation of shoulders

7. Press on the front or the back of the baby's bottom shoulder to achieve rotation

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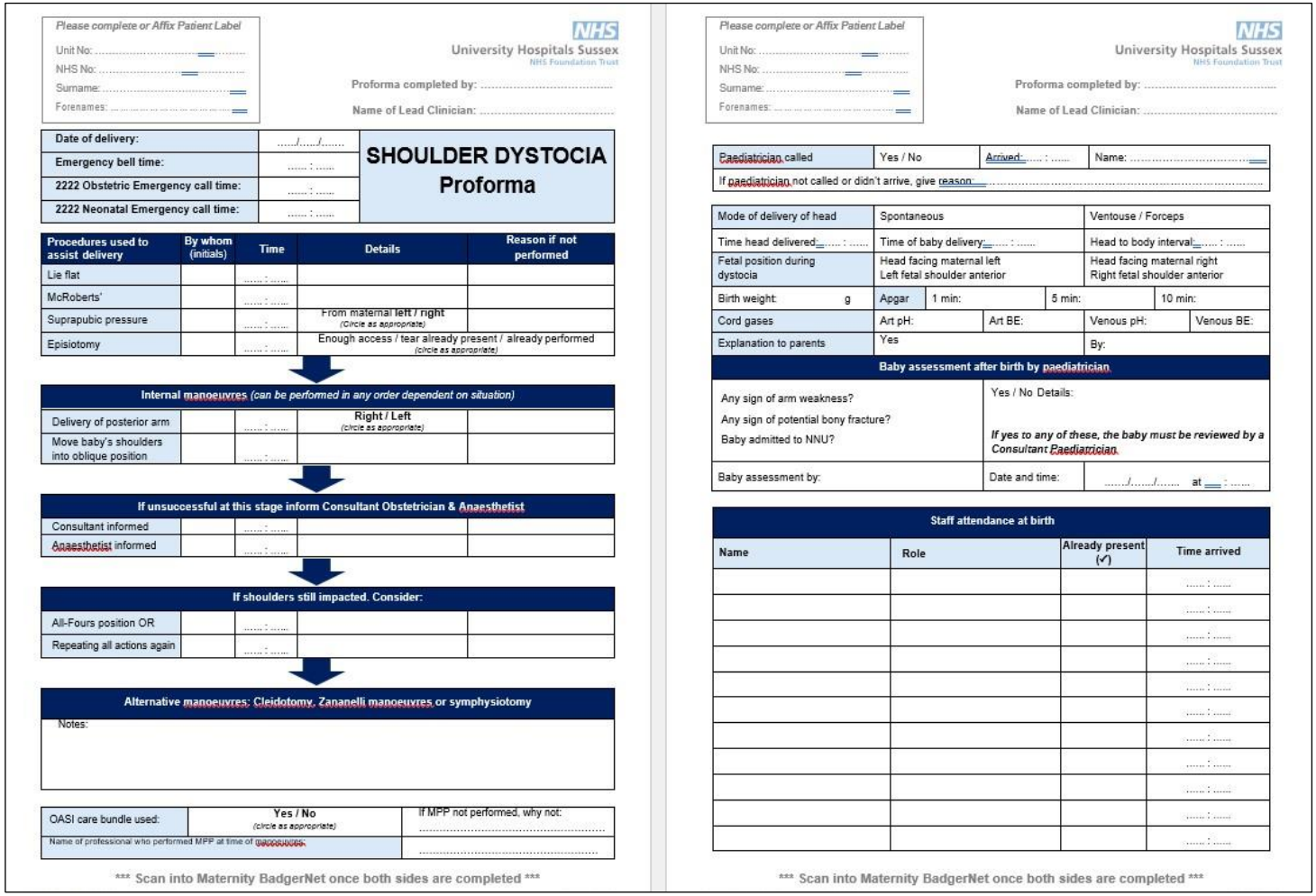
Appendix 2: Shoulder Dystocia Proforma

PLEASE DO NOT PRINT FROM GUIDELINE. PROFORMA CAN BE FOUND ON SHAREPOINT ALONGSIDE GUIDELINE.



Please complete or Affix Patient Label

Unit No: ....
NHS No: ....
Surname: ....
Forenames: ....

NHS
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NHS Foundation Trust

Proforma completed by: .....
Name of Lead Clinician: .....

Date of delivery:	...../...../.....
Emergency bell time:	..... : .....
2222 Obstetric Emergency call time:	..... : .....
2222 Neonatal Emergency call time:	..... : .....

SHOULDER DYSTOCIA Proforma

Procedures used to assist delivery	By whom (initials)	Time	Details	Reason if not performed
Lie flat		..... :		
McRoberts'		..... :		
Suprapubic pressure		..... :	From maternal left / right (Circle as appropriate)	
Episiotomy		..... :	Enough access / tear already present / already performed (circle as appropriate)	

Internal manoeuvres *(can be performed in any order dependent on situation)*

Delivery of posterior arm		..... :	Right / Left (circle as appropriate)	
Move baby's shoulders into oblique position		..... :		

If unsuccessful at this stage inform Consultant Obstetrician & Anaesthetist

Consultant informed		..... :		
Anaesthetist informed		..... :		

If shoulders still impacted. Consider:

All-Fours position OR		..... :		
Repeating all actions again		..... :		

Alternative manoeuvres: Cleidotomy, Zananelli manoeuvres or symphysiotomy

Notes:

OASI care bundle used:	Yes / No (circle as appropriate)	If MPP not performed, why not: .....
Name of professional who performed MPP at time of [illegible]		.....

*** Scan into Maternity BadgerNet once both sides are completed ***

Please complete or Affix Patient Label

Unit No: ....
NHS No: ....
Surname: ....
Forenames: ....

NHS
University Hospitals Sussex
NHS Foundation Trust

Proforma completed by: .....
Name of Lead Clinician: .....

Paediatrician called	Yes / No	Arrived: ..... :	Name: .....
If paediatrician not called or didn't arrive, give reason:			

Mode of delivery of head	Spontaneous		Ventouse / Forceps	
Time head delivered: ..... :	Time of baby delivery: ..... :		Head to body interval: ..... :	
Fetal position during dystocia	Head facing maternal left Left fetal shoulder anterior		Head facing maternal right Right fetal shoulder anterior	
Birth weight: g	Apgar	1 min:	5 min:	10 min:
Cord gases	Art pH:	Art BE:	Venous pH:	Venous BE:
Explanation to parents	Yes		By:	

Baby assessment after birth by paediatrician

Any sign of arm weakness? Any sign of potential bony fracture? Baby admitted to NNU?	Yes / No Details: ***If yes to any of these, the baby must be reviewed by a Consultant Paediatrician***	
Baby assessment by:	Date and time:	...../...../..... at ... : .....

Staff attendance at birth

Name	Role	Already present (✓)	Time arrived
			..... : .....
			..... : .....
			..... : .....
			..... : .....
			..... : .....
			..... : .....
			..... : .....
			..... : .....
			..... : .....
			..... : .....
			..... : .....

*** Scan into Maternity BadgerNet once both sides are completed ***

Appendix 3: Guideline version control log

Version	Date	Author	Status	Comment
1.0	November 2024	C. Madziwa B. Middleton, Obstetric Consultant S.Thompson Practice Development Midwife	LIVE	New Trust wide guideline replacing: • CG1149 Shoulder Dystocia (SRH&WH) • MP048 Shoulder Dystocia (PRH&RSCH)

Appendix 4: Due Regard Assessment Tool

To be completed and attached to any guideline when submitted to the appropriate committee for consideration and approval.

		Yes/No	Comments
1.	**Does the document/guidance affect one group less or more favourably than another on the basis of:**		
	Age	*No*	
	· Disability	*No*	
	· Gender (Sex)	*No*	
	· Gender Identity	*No*	
	· Marriage and civil partnership	*No*	
	· Pregnancy and maternity	*No*	
	· Race (ethnicity, nationality, colour)	*No*	
	· Religion or Belief	*No*	
	· Sexual orientation, including lesbian, gay and bisexual people	*No*	
2.	**Is there any evidence that some groups are affected differently and what is/are the evidence source(s)?**	*No*	
3.	**If you have identified potential discrimination, are there any exceptions valid, legal and/or justifiable?**	*NA*	
4.	**Is the impact of the document likely to be negative?**	*No*	
5.	**If so, can the impact be avoided?**	*NA*	
6.	**What alternative is there to achieving the intent of the document without the impact?**	*NA*	
7.	**Can we reduce the impact by taking different action and, if not, what, if any, are the reasons why the guideline should continue in its current form?**	*NA*	
8.	**Has the document been assessed to ensure service users, staff and other stakeholders are treated in line with Human Rights FREDA principles (fairness, respect, equality, dignity and autonomy)?**	*Yes*	

If you have identified a potential discriminatory impact of this guideline, please refer it to [Insert Name], together with any suggestions as to the action required to avoid/reduce this impact. For advice in respect of answering the above questions, please contact uhsussex.equality@nhs.net 01273 664685).

Appendix 5: Template Dissemination, Implementation and Access Plan

To be completed and attached to any guideline when submitted to Corporate Governance for consideration and TMB approval.

	Dissemination Plan	**Comments**
1.	Identify:	
	Which members of staff or staff groups will be affected by this guideline?	Midwives, obstetricians & anaesthetists.
	How will you confirm that they have received the guideline and understood its implications?	Dissemination through the usual communication channels and highlighted at Safety Huddles.
	How have you linked the dissemination of the guideline with induction training, continuous professional development, and clinical supervision as appropriate?	All new members of staff are shown where to access Clinical documents that are relevant to their area of practice.
2.	How and where will staff access the document (at operational level)?	Accessed by staff via Sharepoint.

		Yes/No	**Comments**
3.	Have you made any plans to remove old versions of the guideline or related documents from circulation?	Yes	Previous versions will be archived as part of the uploading onto sharepoint process.
4.	Have you ensured staff are aware the document is logged on the organisation's register?	Yes	Dissemination plan includes notifying staff via email, departmental noticeboards, and safety huddles.

Appendix 6: Additional guidance and information

NMC (2015) The Code: Professional Standards of Practice and Behaviour for Nurses, Midwives and Nursing Associates.

RCOG (2012) Shoulder Dystocia Green top Guideline No. 42. RCOG. London.

PROMPT (2021) Annual update 2021 (Licence for 2022/2023 not procured; for 2024-this is to be revised)

Patient information

An information leaflet for parents “A difficult birth: what is shoulder dystocia?” produced by the RCOG is available online (www.rcog.org.uk/for-the-public/)

The Erb’s Palsy Group (http://www.erbspalsy.co.uk/erbspalsygroup.org.uk) provides an excellent support network for children and families affected by BPI.

Women and birthing people can also self-refer to Birth stories - University Hospitals Sussex NHS Foundation Trust