

PROMPT

PRactical Obstetric Multi-Professional Training

Course Manual

Third Edition

Edited by

Cathy Winter, Joanna Crofts, Timothy Draycott
and Neil Muchatuta



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Editorial team and contributors

PROMPT Editorial Team

Joanna Crofts	Consultant Obstetrician, Bristol
Timothy Draycott	Consultant Obstetrician, Bristol
Neil Muchatuta	Consultant Anaesthetist, Bristol
Cathy Winter	Senior Research Midwife, Bristol

Contributors

Ms Mary Alvarez	Senior Research Midwife, Bristol
Lt-Col Tracy-Louise Appleyard	Consultant Obstetrician and Gynaecologist, Bristol/RAMC
Dr Sonia Barnfield	Consultant Obstetrician, Bristol
Ms Andrea Blotkamp	Clinical Fellow in Midwifery, RCOG
Dr Christy Burden	NIHR Academic Clinical Lecturer, University of Bristol
Dr Yealin Chung	Academic Research Fellow, Bristol
Dr Kate Collins	PMF Research Fellow, Bristol
Dr Katie Cornthwaite	NIHR Academic Clinical Fellow, Bristol
Dr Joanna Crofts	Consultant Obstetrician, Bristol
Mr Max Crofts	PMF Volunteer, Bath
Dr Ishita Das	Specialty Trainee in Obstetrics and Gynaecology, Bristol
Dr Fiona Donald	Consultant Anaesthetist, Bristol

Editorial team and contributors

Professor Timothy Draycott	Consultant Obstetrician, Bristol
Dr Sian Edwards	Specialty Trainee in Obstetrics and Gynaecology, Gloucester
Dr Islam Gamaleldin	NIHR Academic Clinical Lecturer, University of Bristol
Dr Kiren Ghag	PMF Research Fellow, Bristol
Ms Susan Hughes	Senior Midwife, Bristol
Dr Judith Hyde	Consultant Obstetrician, Bristol
Mr Mark James	Consultant Obstetrician and Gynaecologist, Gloucester
Ms Sharon Jordan	Senior Midwife, Bristol
Dr Christina Laxton	Consultant Anaesthetist, Bristol
Dr Erik Lenguerrand	Medical Statistician, University of Bristol
Ms Mary Lynch	Senior Midwife, Bristol
Ms Lisa Marshall	PMF Midwife Project Manager, Bristol
Dr Neil Muchatuta	Consultant Anaesthetist, Bristol
Dr Helen van der Nelson	Specialty Trainee in Obstetrics and Gynaecology, Gloucester
Dr Stephen O’Brien	PMF Research Fellow, Bristol
Dr Kate O’Connor	Consultant Anaesthetist, Bristol
Dr David Odd	Consultant Neonatologist, Bristol
Ms Beverley Osborne	Senior Midwife, Bristol
Dr Mark Scrutton	Consultant Anaesthetist, Bristol
Ms Debbie Senior	Practice Development Midwife, Bristol
Dr Dimitrios Siassakos	Clinical Lecturer in Obstetrics, University of Bristol
Dr Thabani Sibanda	Consultant Obstetrician, New Zealand
Dr Rebecca Simms	Consultant Obstetrician, Bristol
Ms Debbie Sirett	PMF Support Manager

Editorial team and contributors

Ms Angie Sledge	Senior Midwife, Bristol
Ms Ellie Sonmezer	Senior Midwife, Gloucester
Dr Maria Tsakmakis	Consultant Neonatologist, Bristol
Dr Tim Walker	Specialty Doctor in Anaesthetics, Bristol
Dr Nicky Weale	Consultant Anaesthetist, Bristol
Ms Heather Wilcox	Senior Midwife, Bristol
Mr Nigel Williams	PMF Voluntary Legal Advisor, Wales
Ms Cathy Winter	PMF Senior Research Midwife, Bristol
Ms Meg Winter	PMF Volunteer, Bristol
Ms Stephanie Withers	Practice Development Midwife, Bristol
Ms Elaine Yard	Senior Midwife, Bristol
Dr Christopher Yau	PMF Research Fellow, Bristol

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The PROMPT Maternity Foundation (PMF) is a registered charity in England and Wales (Charity No. 1140557). The aim of the charity is to improve awareness and facilitate the distribution of effective, multi-professional, obstetric emergencies training as widely as possible to areas of the world requesting access to an economical and sustainable training model.

Over the past 5 years, there has been increasing evidence that the PROMPT method of training for maternity emergencies is having a significant impact, not only in the UK but internationally. In 2016, PROMPT training was recognised in the NHS England National Maternity Review, *Better Births*.

The growth and increasing recognition of PROMPT training is underpinned by robust research, collecting further evidence to support the improvements in outcomes seen in some maternity units in the UK and across the globe. PMF research projects are funded through fundraising, corporate partnerships and research grants from both UK and international bodies.

Internationally, PROMPT is now being taught in the USA, Australia, New Zealand, Zimbabwe, Laos, Abu Dhabi and UAE, Singapore, Hong Kong, Philippines, Switzerland, France, Germany, Spain and the West Indies.

This is the third edition of the *PROMPT Course Manual*, and it has been developed and produced with the help of:

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- The PROMPT Maternity Foundation trustees, members, researchers and facilitators
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Abbreviations and terms

ABC	airway, breathing, circulation
AED	automated external defibrillator
AFE	amniotic fluid embolism
ALS	advanced life support
ALT	alanine aminotransferase
AOI	Adverse Outcome Index
APH	antepartum haemorrhage
APTT	activated partial thromboplastin time
AST	aspartate aminotransferase
AVPU	alert, responsive to voice, responsive to painful stimuli, unresponsive
bd.....	twice daily
BE.....	base excess
BIPAP	bi-level positive airway pressure
BLS	basic life support
BMI	body mass index
BP	blood pressure
BPI	brachial plexus injury
bpm	beats per minute
Ca ²⁺	calcium
CMACE	Centre for Maternal and Child Enquiries
CNST	Clinical Negligence Scheme for Trusts
CO ₂	carbon dioxide
CPAP	continuous positive airway pressure

List of Abbreviations and terms

CPR	cardiopulmonary resuscitation
CQC	Care Quality Commission
CRM	crew resource management
CRP	C-reactive protein
CT	computed tomography
CTG	cardiotocograph
CTPA	computed tomography pulmonary angiography
CUSUM	cumulative sum control chart
CVE	cerebrovascular event
CVP	central venous pressure
DAS	Difficult Airway Society
DIC	disseminated intravascular coagulation
DVT	deep vein thrombosis
ECG	electrocardiogram
ECV	external cephalic version
EFM	electronic fetal heart rate monitoring
eGFR	estimated glomerular filtration rate
EUA	examination under anaesthetic
FBC	full blood count
EUA	examination under anaesthetic
FBS	fetal blood sample
FFP	fresh frozen plasma
FH	fetal heart
FHR	fetal heart rate
FIGO	International Federation of Gynecology and Obstetrics
FSE	fetal scalp electrode
FSS	fetal scalp stimulation
GA	general anaesthesia

List of Abbreviations and terms

GAS	group A <i>Streptococcus</i>
GDG	guideline development group
GI	gastrointestinal
GMC	General Medical Council
GTN	glyceryl trinitrate
HELLP syndrome	haemolysis, elevated liver enzymes and low platelets
HELP	Head Elevating Laryngoscopy Pillow
HES	Hospital Episode Statistics
HIE	hypoxic–ischaemic encephalopathy
HIV	human immunodeficiency virus
HVS	high vaginal swab
IA	intermittent auscultation
ICU	intensive care unit
IM	intramuscular
IMox Study	Intramuscular Oxytocics Study
IO	intraosseous
IOL	induction of labour
IPPV	intermittent positive pressure ventilation
IV	intravenous
IVF	in-vitro fertilisation
J	joules
K ⁺	potassium
LCAs	legal claim analyses
LFT	liver function test
LMA	laryngeal mask airway
MBRRACE-UK	Mothers and Babies: Reducing Risk through Audits and Confidential Enquiries across the UK
MLU	midwife-led unit

List of Abbreviations and terms

MOEWS	modified obstetric early warning score
MRI	magnetic resonance imaging
Na ⁺	sodium
NEWS	neonatal early warning score
NHS	National Health Service
NHSLA	NHS Litigation Authority (known as NHS Resolution from 2017)
NICE	National Institute for Health and Care Excellence
NIHR	National Institute for Health Research
NMC	Nursing and Midwifery Council
NPSA	National Patient Safety Agency
OAA	Obstetric Anaesthetists' Association
ODP	operating department practitioner
OVb	operative vaginal birth
PaCO ₂	arterial partial pressure of carbon dioxide
PACS	picture archiving and communication system
PaO ₂	arterial partial pressure of oxygen
PCI	percutaneous coronary intervention
PEA	pulseless electrical activity
PEEP	positive end-expiratory pressure
PO	by mouth (per os)
PPH	postpartum haemorrhage
PPROM	preterm pre-labour rupture of membranes
PR	per rectum
PROMs	patient-reported outcome measures
PV	per vaginam
qds	four times daily
QI	quality indicator

List of Abbreviations and terms

RAG	red / amber / green
RCM	Royal College of Midwives
RCOG	Royal College of Obstetricians and Gynaecologists
RCT	randomised controlled trial
RDS	respiratory distress syndrome
rFVIIa	recombinant factor VIIa
RR	respiratory rate or relative risk
SI	Severity Index
SBAR	situation, background, assessment and recommendation/response
SC	subcutaneous
SRM	spontaneous rupture of membranes
tds	three times daily
TXA	tranexamic acid
U&Es	urea and electrolytes
UKOSS	United Kingdom Obstetric Surveillance System
VBAC	vaginal birth after caesarean
VE	vaginal examination
VF	ventricular fibrillation
V/Q scan	ventilation/perfusion scan
VT	ventricular tachycardia
VTE	venous thromboembolism
WAOS	Weighted Adverse Outcome Score
WBC	white blood cell count
WHO	World Health Organization
WOMAN trial	World Maternal Antifibrinolytic trial

Foreword

Nine years after the first edition, this is the third and expanded edition of the *PROMPT Course Manual*. It is part of the PROMPT multi-professional obstetric emergencies training package, and it will be useful in all areas of the world requesting access to an economical and sustainable training model.

Training in obstetric emergencies and obtaining appropriate knowledge and skills has to be multi-professional, since cooperation between maternity caregivers is essential, and the weakest part of the chain may determine maternal and perinatal outcomes. That is why the first module of this *Course Manual* is dedicated to team working. The next 14 modules cover a large range of maternal emergencies, as well as fetal monitoring in labour, complicated births and basic newborn resuscitation.

The PROMPT training package consists of a 'Course in a Box' which includes a *Course Manual*, a *Trainer's Manual* and additional downloadable lectures, videos and algorithms. It provides course materials to enable local staff to run in-house multi-professional obstetric emergencies courses in their own maternity units or other local settings.

The training package is written by a team of expert clinical researchers who have many years of experience of conducting PROMPT training, both locally and around the world. PROMPT has been implemented across the UK and also in North America, Australasia, parts of Africa, Asia and Europe. The training materials are adaptable to low- and high-resource settings.

The evaluation of the effectiveness of the training with regard to its associated improvements in clinical outcomes is a priority of the PROMPT team. The final chapter of this manual emphasises the importance of measuring and monitoring outcomes to ensure the provision of the best-quality care.

Improving safety and quality by better knowledge, skills, teamwork and leadership is our responsibility. Worldwide, there is still much to improve.

Foreword

I am sure that the PROMPT training programme and materials will serve such a purpose.

Gerard H. A. Visser

Emeritus Professor of Obstetrics, Utrecht, the Netherlands

Chair of the FIGO Committee for Safe Motherhood and Newborn Health