New WHO-FIGO-ICM-RTCOG guidelines for the prevention diagnosis and treatment of postpartum hemorrhage

Postpartum Hemorrhage in 2026: From Global Guidelines to Local Action

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Chairman of Professional Standards Committee, RTCOG
MFM Unit, Department of Obstetrics & Gynecology
Prince of Songkla University

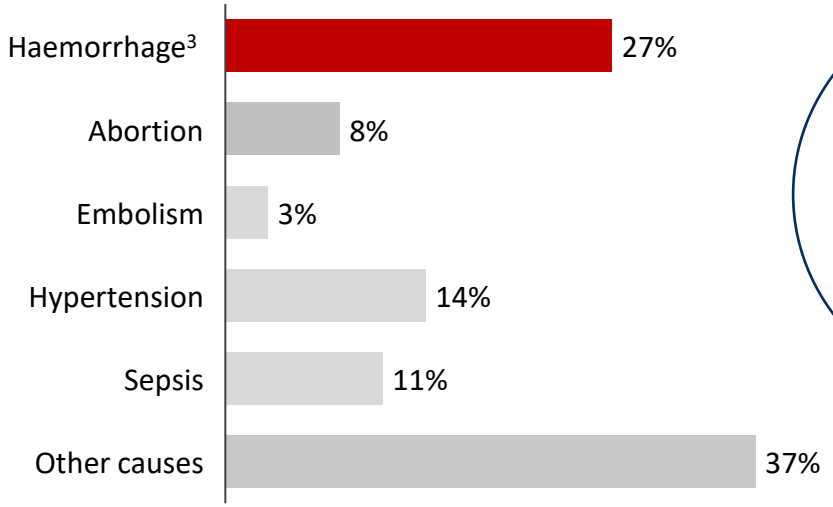
Globally, obstetric haemorrhage accounts for 27% of maternal mortality

Out of ~140 million women giving birth every year,
PPH incidencese 12.6% for vaginal delivery
30.9% for caesarean birth

26.8M
PPH cases yearly

Defined as blood loss of 500 ml or more within 24h of birth

PPH remains a leading cause of maternal mortality worldwide[2]

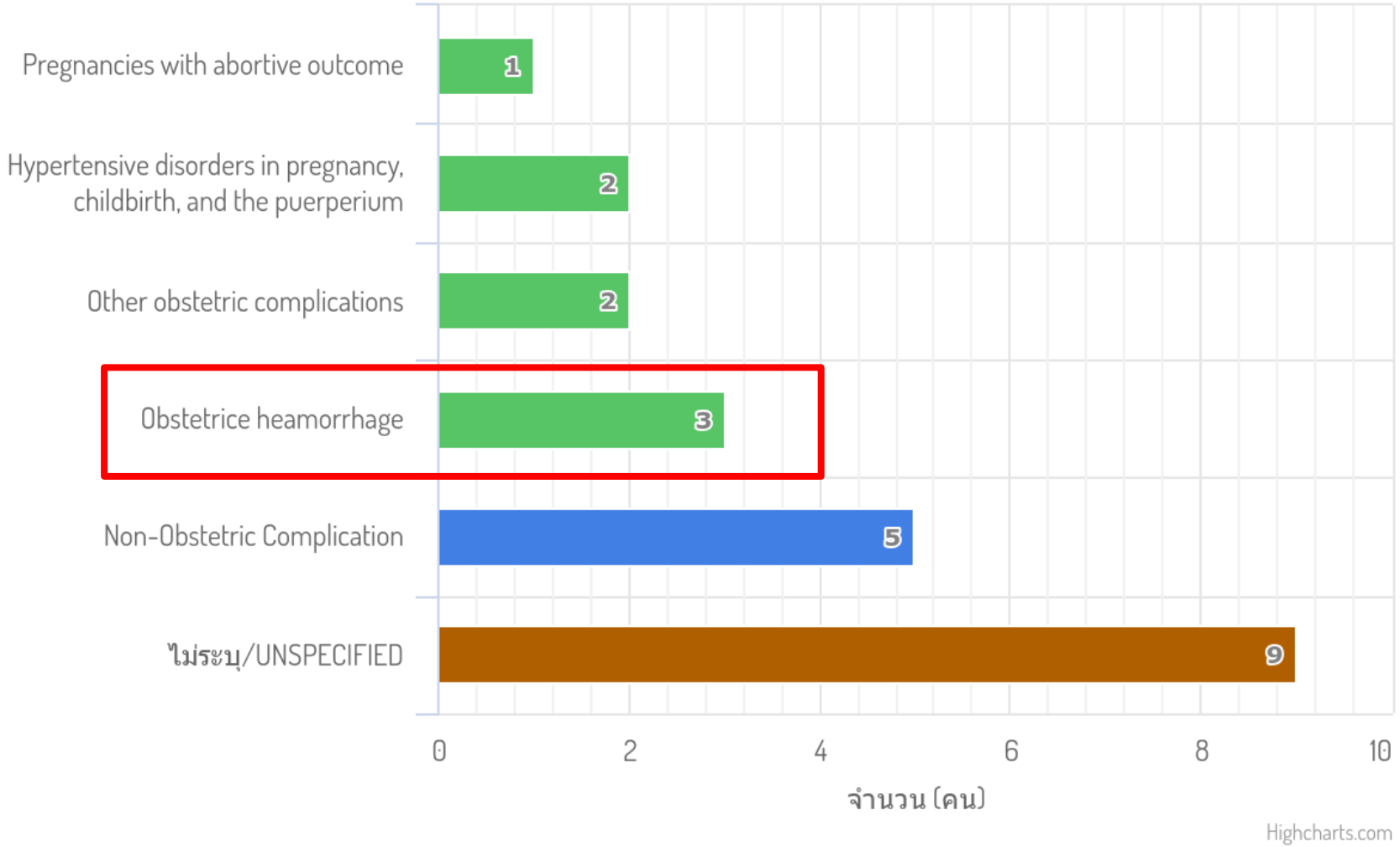


~45,000
PPH related deaths yearly

[1] Postpartum haemorrhage: epidemiology, consequences and missed opportunities
[2] Global causes of maternal death: a WHO systematic analysis

Causes of Thailand Maternal Mortality in 2025

สาเหตุการตายของสตรีตั้งครรภ์ในปี 2568



Ministry of Public Health Reports 2025



FIGO XXV WORLD CONGRESS OF GYNECOLOGY AND OBSTETRICS

For more information, visit:

https://tinyurl.com/WHO-PPH-work



End postpartum haemorrhage:

New Consolidated Guidelines and Tools, and the inaugural World Postpartum Haemorrhage Day

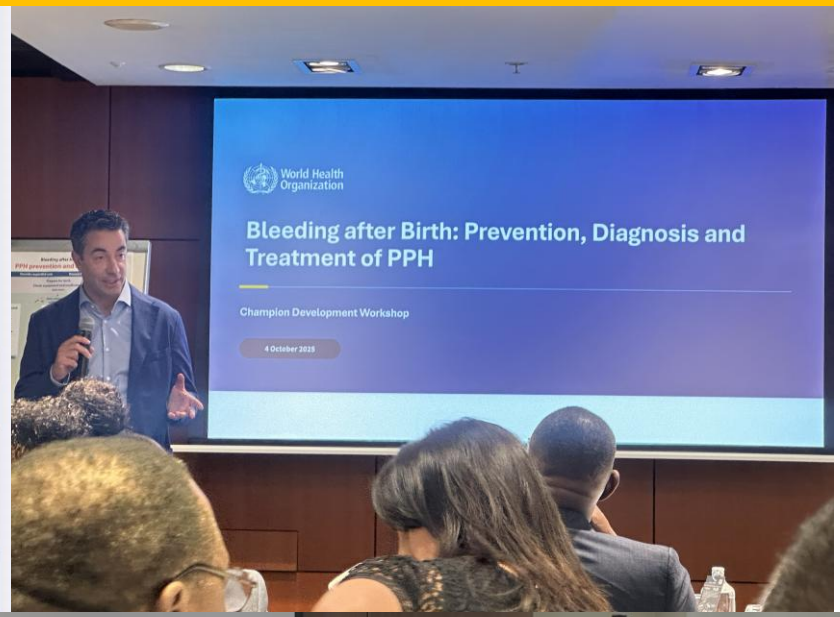


Prof. Kihara Anne Beatrice

Figo President 2023-2025













World Health Organization · FIGO International Federation of Gynecology and Obstetrics · International Confederation of Midwives

FIGO Congress October 2025, Cape Town, South Africa



130+ participants

50+ participating countries

Reflective of PPH diversity

Diverse backgrounds

- Ministries of Health
- Academic Researchers
- Industry and Private Sector
- Professional Associations
- International donors
- Non-Governmental Organizations
- UN Agencies and Partnerships

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Approach for consolidating recommendations into the new postpartum hemorrhage guidelines

Recommendations labeled as:

01. **Revalidated** existing recommendation
(no change to direction/certainty of underpinning evidence)

Revalidated
ยืนยัน

02. **Edited** existing recommendation
(no change to direction/certainty of underpinning evidence;
edits introduced to clarify text)

Edited
ปรับปรุง
(ให้ชัดเจนขึ้น)

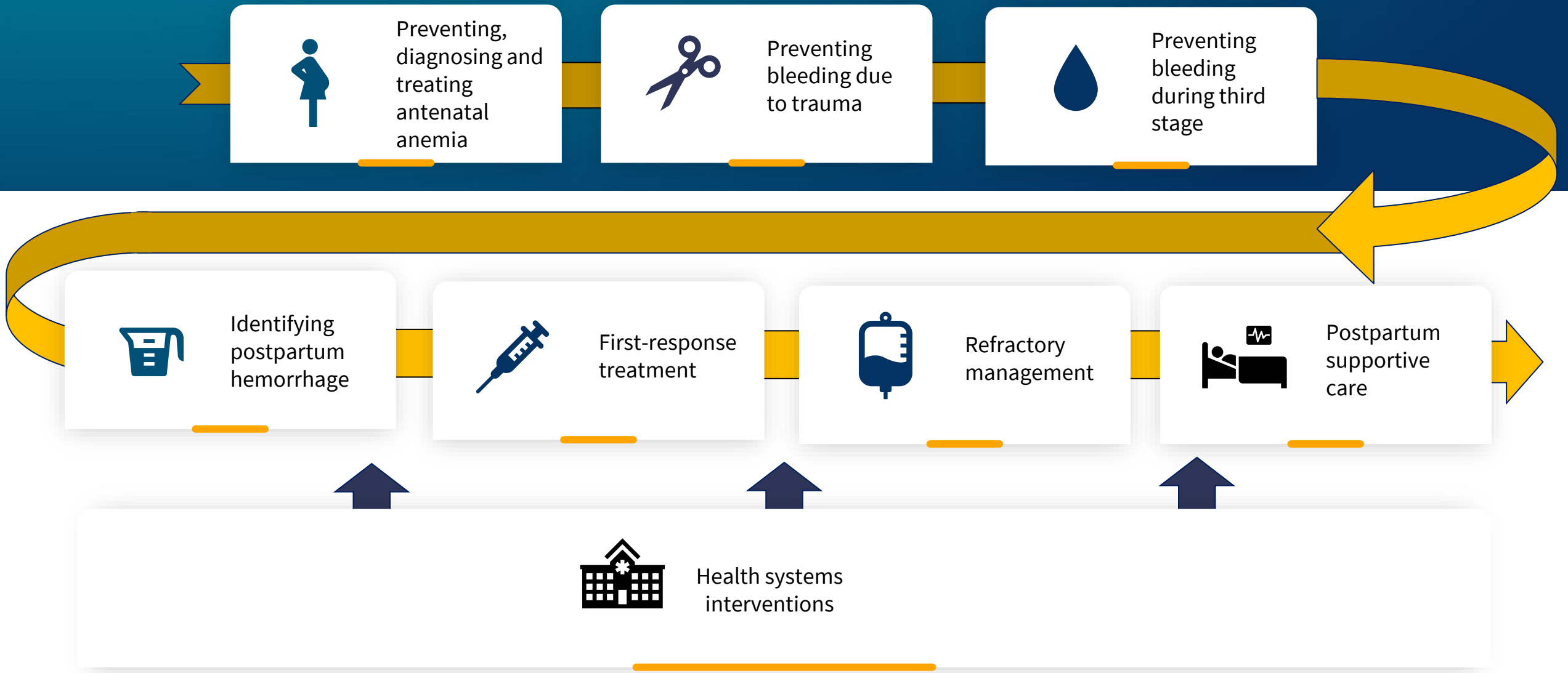
03. **Updated** existing recommendation
(potential change to direction/ certainty of underpinning evidence)

Updated
เปลี่ยนแปลง

04. **New** recommendation
(Added topic, subgroup or interventions that was not previously included in WHO guidelines)

NEW
เพิ่มใหม่

The 51 new, updated, edited and revalidated individual recommendations in the consolidated set of guidelines cover the full spectrum of PPH care



Preventing, **D**iagnosing and **T**reating antenatal anemia

Revalidated **Full blood count testing to diagnose anaemia in pregnancy (ANC)**

Revalidated **Daily oral iron and folic acid supplementation**

Revalidated **Intermittent oral iron and folic acid supplementation**
(120 mg element iron, folic acid 2.8 mg)

NEW **Intravenous iron to treat iron deficiency anaemia in pregnancy**

Preventing bleeding due to trauma (During second stage)

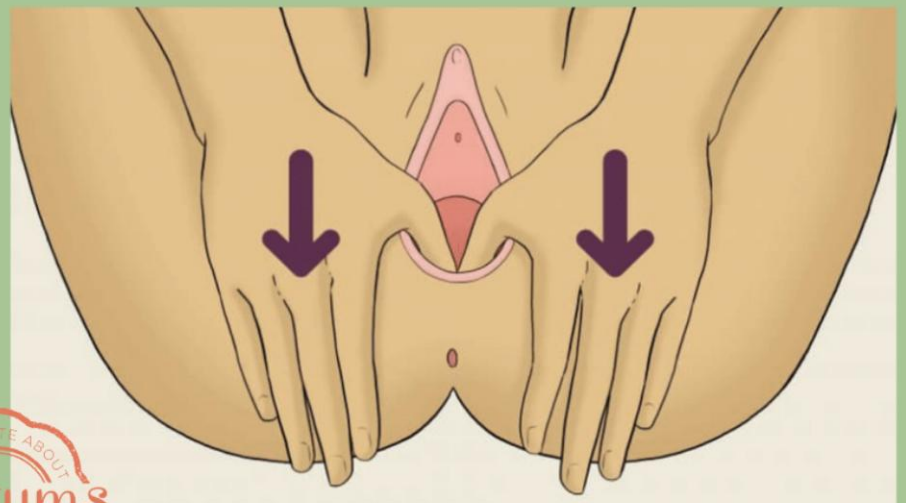
Updated

Techniques for reducing perineal trauma during vaginal birth (including perineal massage, warm compresses and a hands-on guarding of the perineum)

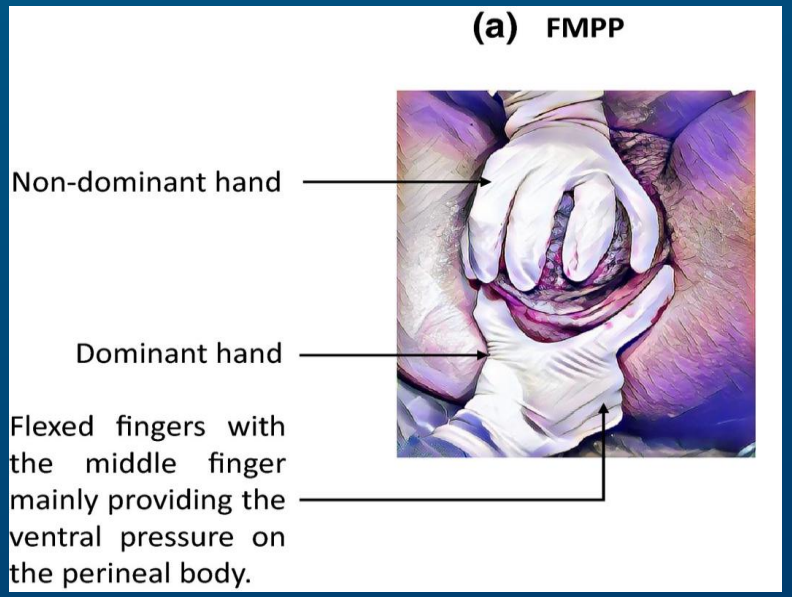
Revalidated

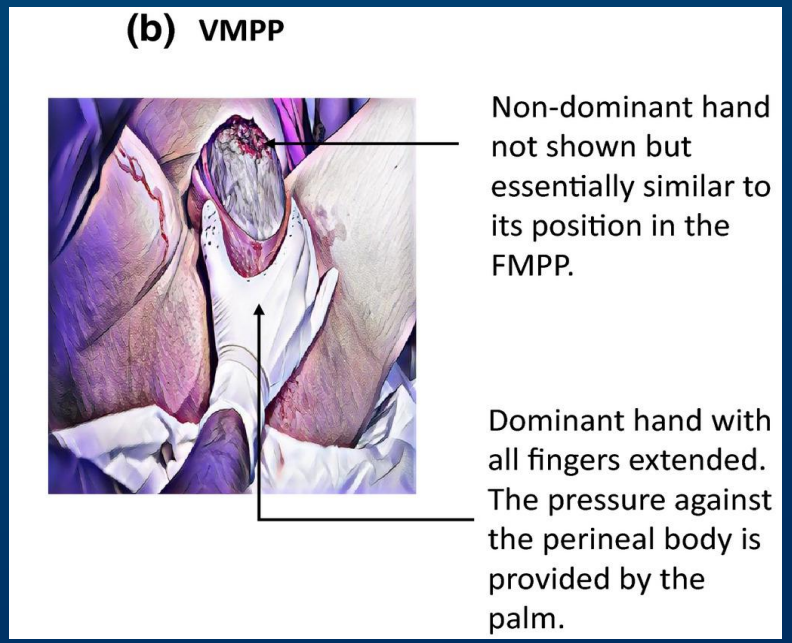
Routine or liberal use of episiotomy is <u>not recommended</u>

Antenatal Perineal Massage



- From 34 weeks to term
- 5 to 10 minutes, about 3 to 4 times a week





Hands-on guarding of the perineum

Manual perineal protection: The know-how and the know-why. Hana Kleprlikova, et al. Acta Obstet , 2019

Preventing bleeding during third stage

Updated	**Uterotonics recommended for the prevention of postpartum hemorrhage**
Edited	**Routes of oxytocin administration**
Updated	**Uterotonics not recommended for the prevention of postpartum hemorrhage**
Revalidated	**Advance distribution of misoprostol**
Revalidated	**Controlled cord traction**
Revalidated	**Sustained uterine massage not recommended**
NEW	**Tranexamic acid for PPH prevention not recommended**

Updated

Preventing bleeding during third stage

Uterotonics recommended for the prevention of PPH

The use of a quality-assured uterotonic is recommended for the prevention of PPH during the third stage of labour for all births. To effectively prevent postpartum hemorrhage, **only *one*** of the following uterotonics should be used:

- **Oxytocin** (10 IU IM/IV) is recommended for the prevention of postpartum hemorrhage for all births
- **Carbetocin** (100 µg IM/IV) (eg. durtocin) is recommended for the prevention of postpartum hemorrhage for all births; the *heat-stable carbetocin formulation is recommended in settings where cold chain cannot be guaranteed.*
- **Misoprostol** (either 400 µg or 600 µg, orally) is recommended for the prevention of postpartum hemorrhage for all births

(*Recommended)*

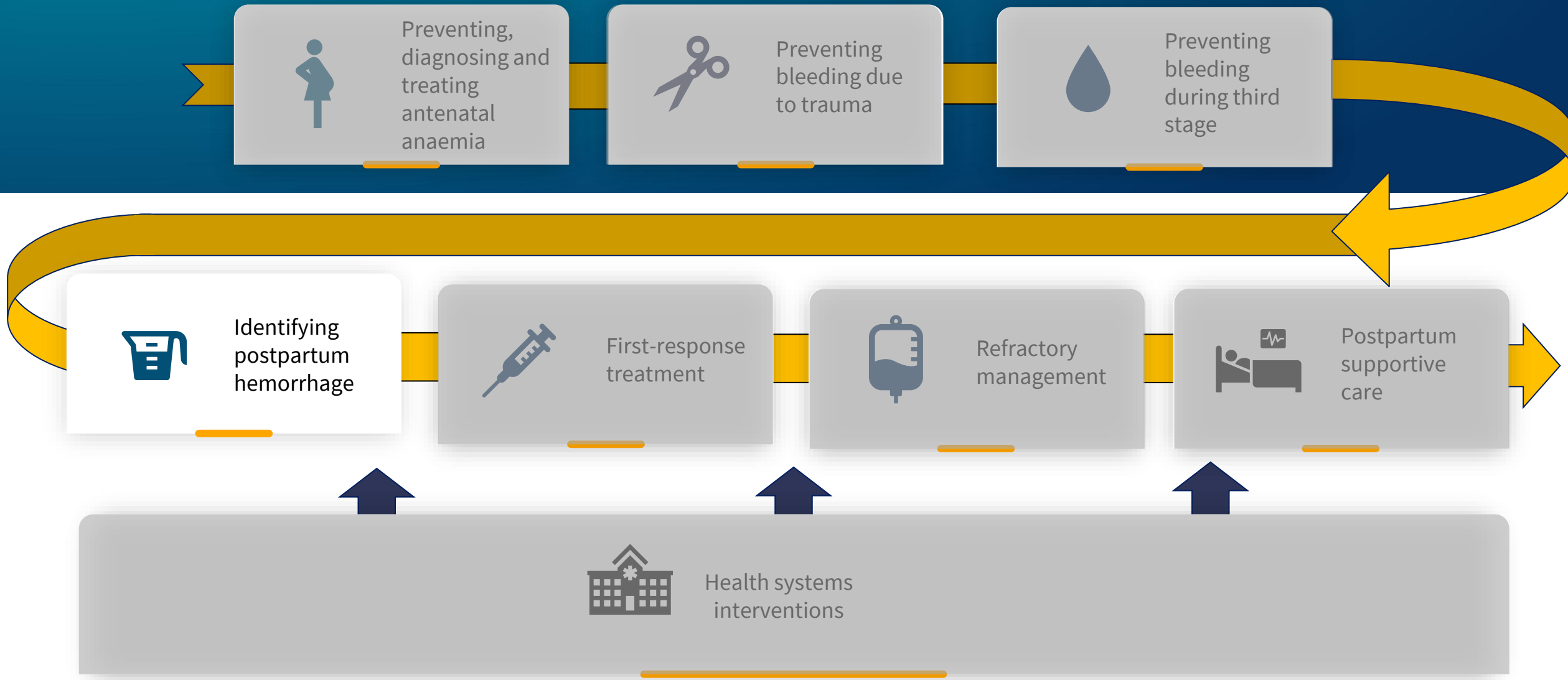
Updated

Preventing bleeding during third stage

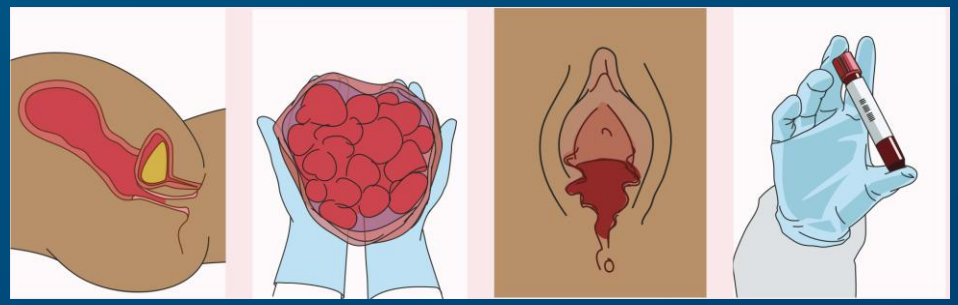
Uterotonics not recommended for the prevention of PPH

- **Ergometrine/methylergometrine**
- **Fixed-dose combination of oxytocin and ergometrine** (eg. Syntometrine)
- **Injectable prostaglandins** (carboprost F2a or sulprostone E2 analogue)

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Identifying postpartum hemorrhage



Revalidated **Uterine tonus assessment for early identification of uterine atony**

Revalidated **Method of blood loss assessment** eg. Calibrated drapes

NEW **Optimal diagnostic criteria for PPH**

Calibrated drapes for vaginal delivery





Credit edpictures: Siriraj Hospital, Mahidol University, Bangkok

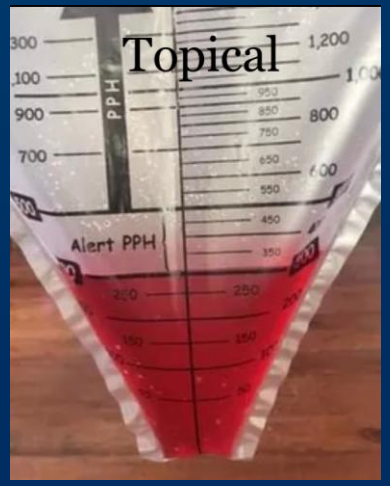
Calibrated drapes for blood loss measurement

Advantages

- Improved Accuracy of Blood Loss measurement
- Early Detection of PPH
- Reduced Severe PPH Incidence
- Enhanced Clinical Vigilance
- Cost-Effective and Simple

Disadvantages

- Increase the delivery cost
- Requires Proper Training
- Limitation with Non-blood Fluids
- Potential for Technical Issues
- Environmental Impact



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International Confederation of Midwives

A new standard for early diagnosis of postpartum haemorrhage

Bleeding Beyond 500 mL

or

NEW

Bleeding 300 mL + clinical sign

clinical sign: rate >100 bpm, systolic blood pressure <100 mmHg, diastolic blood pressure <60 mmHg, or shock index >1 (**Shock Index (SI)** = Heart Rate (HR) ÷ Systolic Blood Pressure (SBP))

Within 24 hours after birth, and with particular vigilance during the first 2 hours

Published 5 October 2025

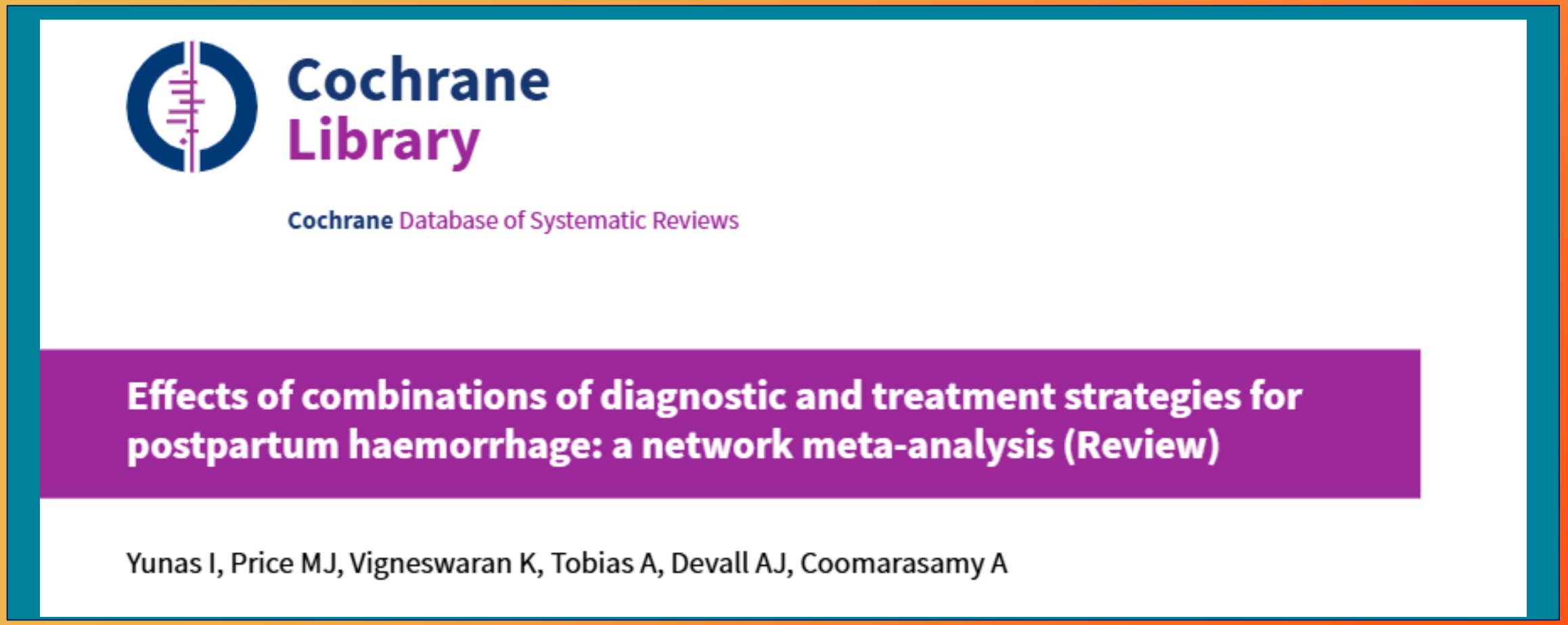
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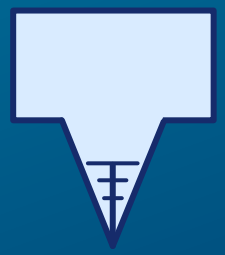
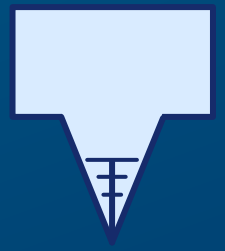
Prognostic accuracy of clinical markers of postpartum bleeding in predicting maternal mortality or severe morbidity: a WHO individual participant data meta-analysis

*Ioannis Gallos, Caitlin R Williams, Malcolm J Price, Aurelio Tobias, Adam Devall, John Allotey, Fernando Althabe, Jenny A Cresswell, Jill Durocher, A Metin Gülmezoglu, Christian Haslinger, Rodolfo C Pacagnella, Loïc Sentilhes, Soha Sobhy, Idnan Yunas, Jonathan J Deeks, Arri Coomarasamy, Olufemi T Oladapo, for the WHO Consortium on Postpartum Haemorrhage Definition**

Potentially eligible datasets were reviewed and harmonized to create a single dataset from 12 datasets (312,151 participants)

Therapeutic evidence



Diagnostic strategy	Treatment	Treatment rate	Effects
 Predominantly **500 mL**	**First-response bundle** (MOTIVE)	**13.9%** 1,348/9,668	Reference
 Predominantly **300 mL + clinical sign** **500 mL** safety net	**First-response bundle** (MOTIVE)	**11.6%** 4,561/39,433	Severe PPH ↓ 62% Blood transfusion ↓ 22% Morbidity and mortality ↓ 22% Maternal deaths ↓ 22%

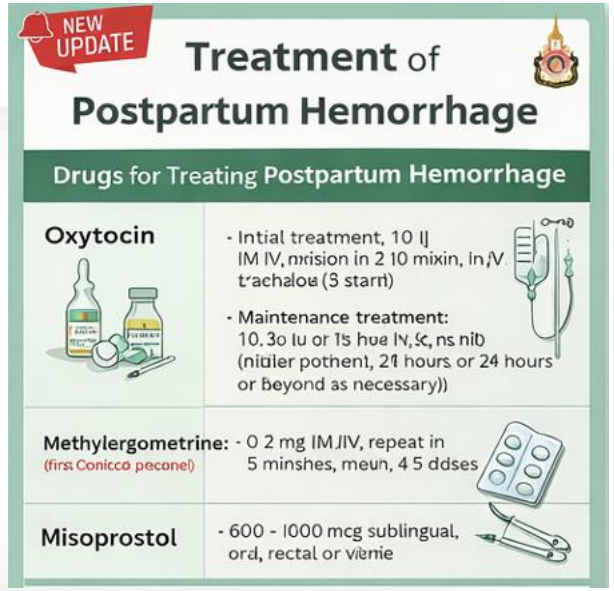
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Yunas I, Price MJ, Vigneswaran K, Tobias A, Devall AJ, Coomarasamy A. Effects of combinations of diagnostic and treatment strategies for postpartum haemorrhage: a network meta-analysis. Cochrane Database of Systematic Reviews 2025, Issue 6. Art. No.: CD016259.

First-response treatment

Revalidated Care bundle for first-response PPH treatment

- **Revalidated** Oxytocin for PPH treatment
- **Revalidated** Alternate uterotonics for PPH treatment
- **Revalidated** Uterine massage for treatment of PPH
- **Edited** Tranexamic acid for treatment of PPH
- **Edited** Isotonic crystalloids for fluid resuscitation



Updated Uterotonics for treatment of retained placenta

Updated Antibiotic prophylaxis for manual removal of retained placenta

Ampicillin 2 gm IV or Cefazolin 1 gm IV+ Metronidazole 500 mg IV

Revalidated Umbilical vein injection of oxytocin

(for delay separation of placenta, administered 20-30 U of Oxytocin)

First-response treatment

Revalidated



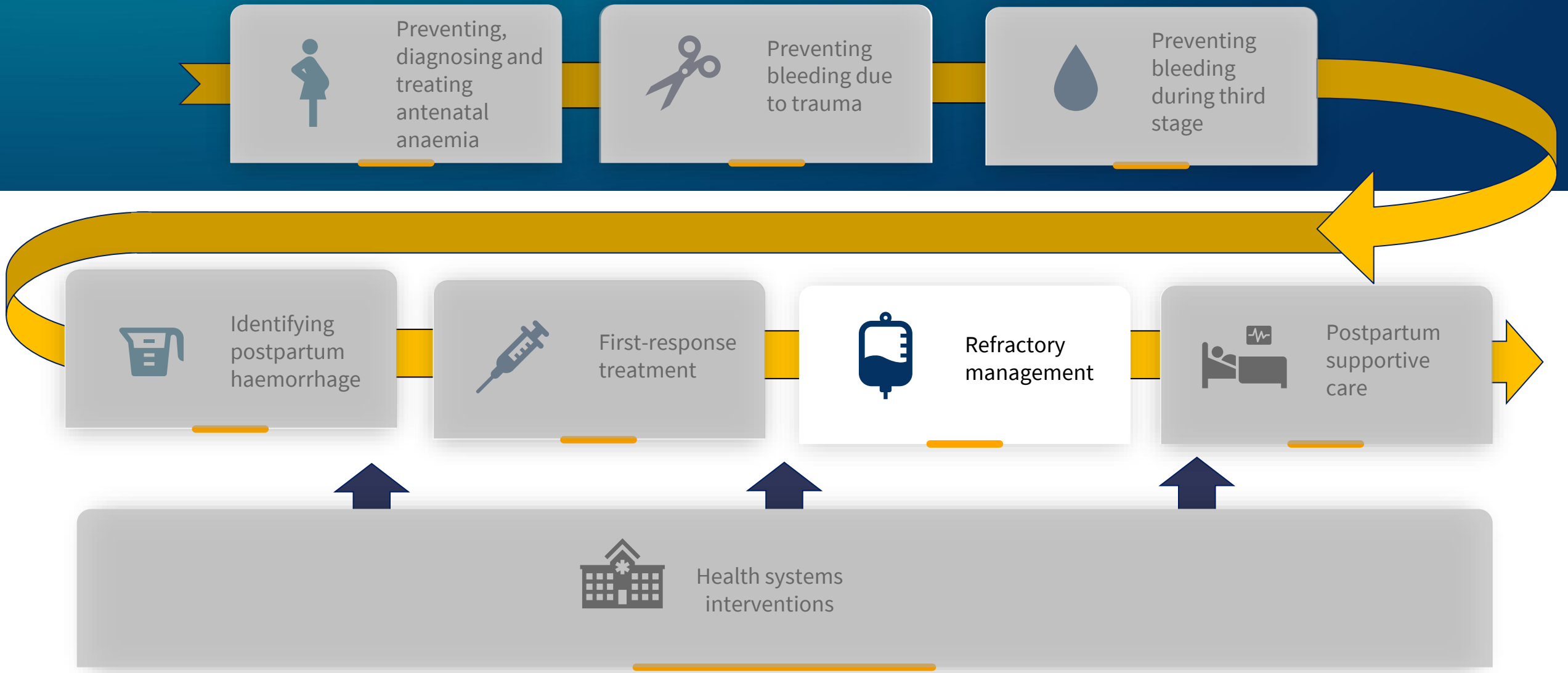
Care bundle for first-response PPH treatment (MOTIVE)

A standardized and timely approach to the management of postpartum hemorrhage.

- Rapid institution of uterine massage
- Administration of an oxytocic agent and tranexamic acid (best timing in 3 hr and repeat in next 30 minutes)
- Intravenous fluids : large bore and crystalloid
- Examination of the genital tract and escalation of care.

(*Recommended*)

The 51 new, updated, edited and revalidated individual recommendations in the consolidated set of guidelines cover the full spectrum of PPH care



Refractory management

Non-invasive temporizing measures

- *Edited* — Bimanual uterine compression
- *Edited* — External aortic compression
- *Edited* — Non-pneumatic anti-shock garment
- *Updated* — Uterine packing not recommended

Invasive temporizing/surgical measures

- *Revalidated* — Uterine balloon tamponade
- *Revalidated* — Uterine artery embolization
- *Revalidated* — Surgical interventions (hysterectomy, arterial ligation)

Use of blood and blood products

- *NEW* — Criteria for initiating transfusion of blood products
- *NEW* — Use of cell salvage

Non-pneumatic anti-shock garment



Mechanism:
By compressing the lower body→ the garment increases vascular resistance→ redirects blood flow upwards → reduces blood loss from the uterus.

Lifesaving Window

NEW

Refractory management
Blood and blood products for transfusion

Initiate transfusion of blood products should be based on underlying risk, continuous clinical and hematological assessments and clear protocol

- Fresh frozen plasma 4 U every 4-6 U of PRC Or if PT/ aPTT > 1.5 of normal level (12-15 ml/kg)
- Platelet concentrate 5 - 10 ml/kg if platelet < 75,000 /ul
- Cryoprecipitate 8 - 10 units if fibrinogen < 200 mg/dl or suspected of DIC
- PRC : FFP : Platelets 4:4:1หรือ 6:4:1
- Emergency: uncrossmatched group-specific blood or group “O Rh negative” to keep Hb > 8



Post-PPH supportive care

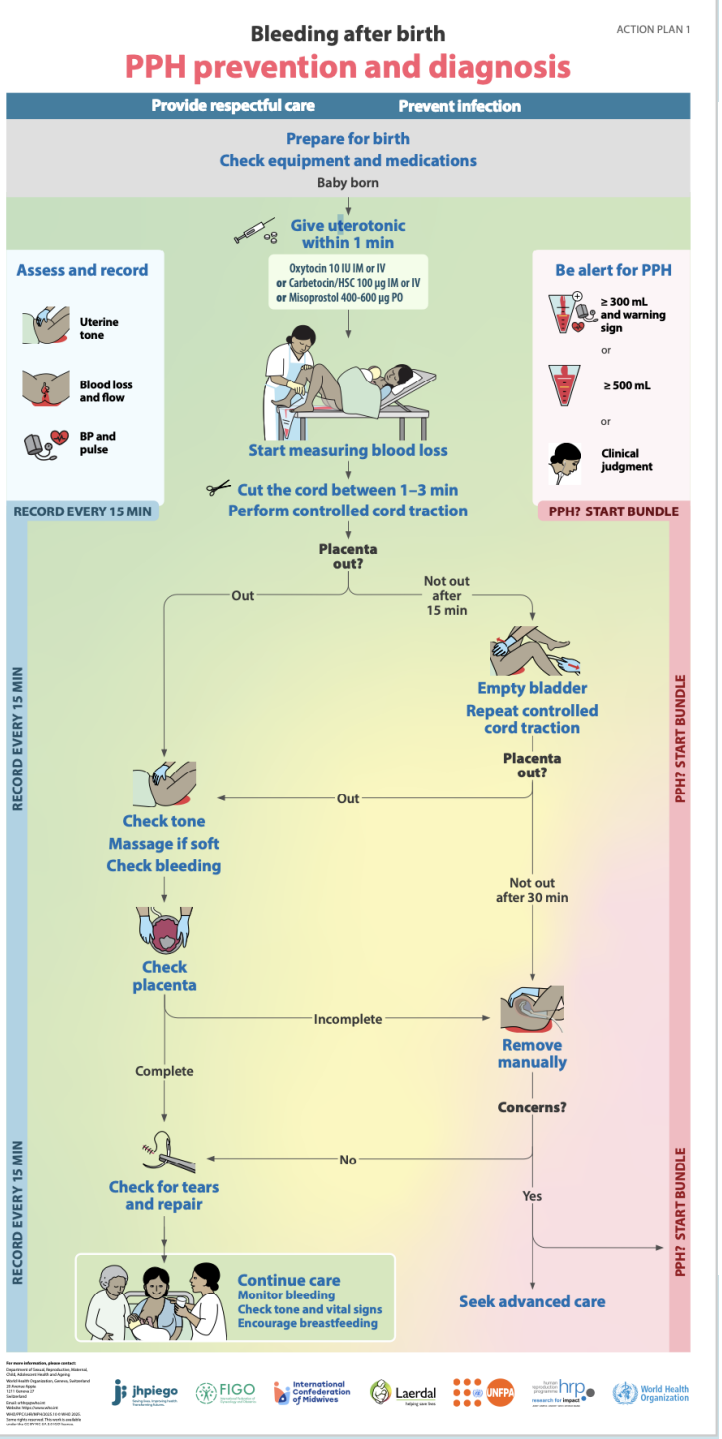
Revalidated

Postpartum oral iron supplementation

NEW

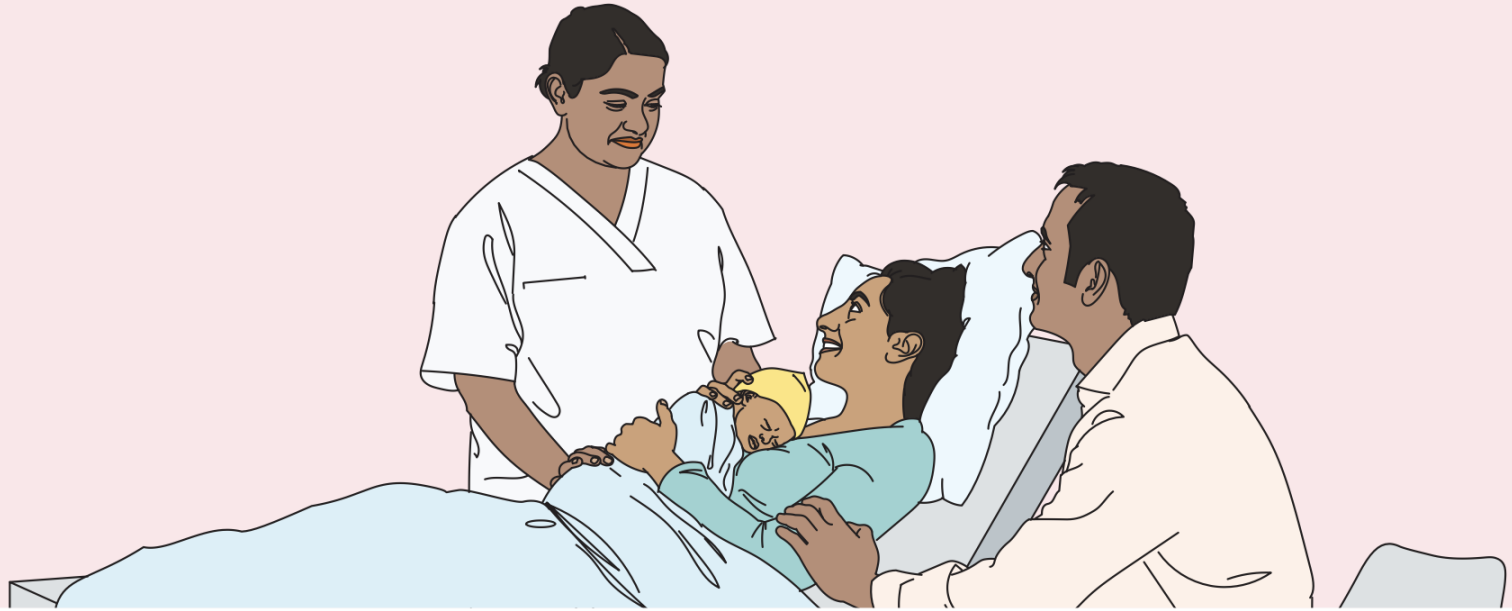
Postpartum intravenous iron

- oral iron therapy for women with iron-deficiency anemia after birth
- when oral iron cannot be used or is not tolerated or there is a clinical need to treat women with severe iron-deficiency anemia rapidly



Bleeding after birth

Course on prevention, diagnosis and treatment of postpartum haemorrhage



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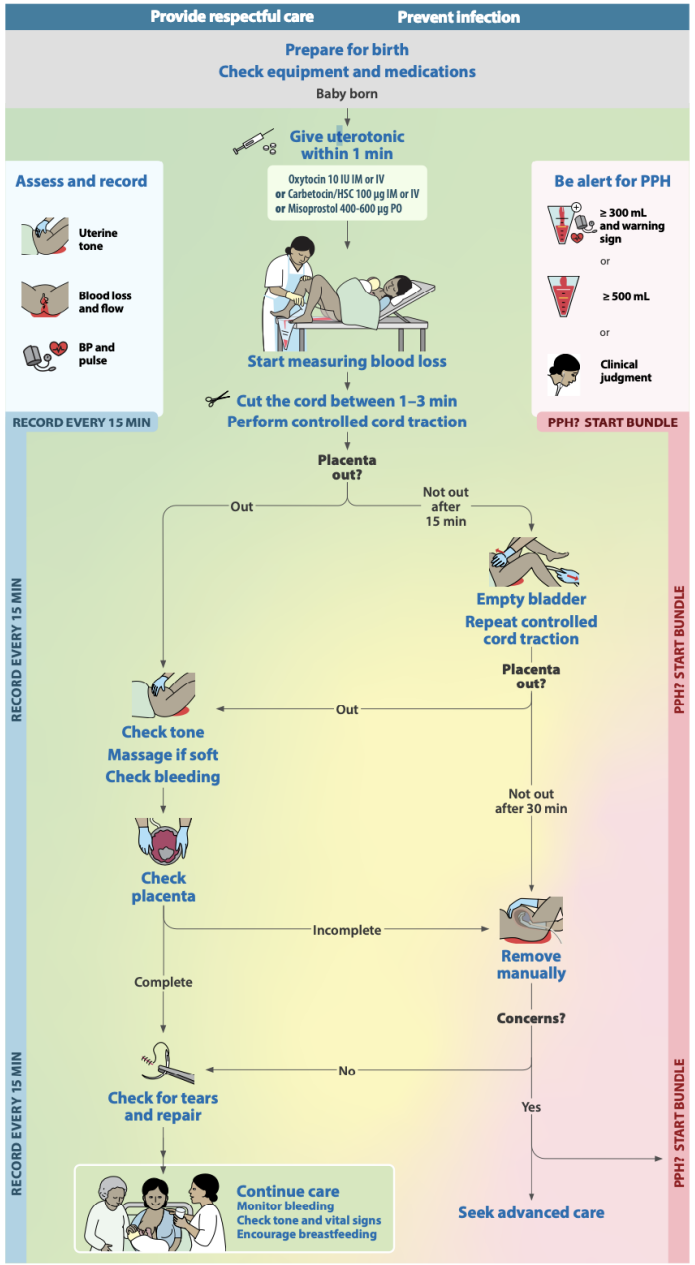
human reproduction programme hrp
research for impact
UNDP · UNFPA · UNICEF · WHO · WORLD BANK

World Health Organization

Bleeding after birth

ACTION PLAN 1

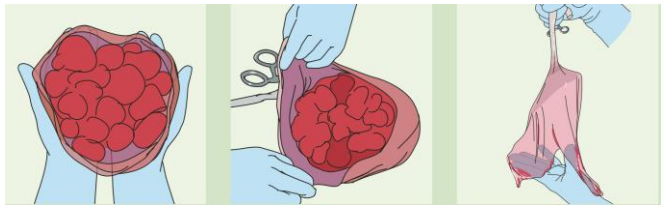
PPH prevention and diagnosis

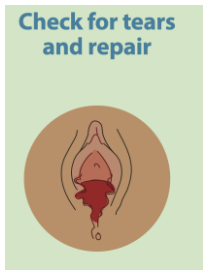


For more information, please contact:
Department of Sexual, Reproductive, Maternal, Child, Adolescent Health and Ageing
World Health Organization, Geneva, Switzerland
20 Avenue Appia
1211 Geneva 27
Switzerland
Email: srhhq@who.int
Website: https://www.who.int
WHO/PPC/CARE/MPAC/2021.13-V1-WHO-2021
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Provide respectful care
Prevent infection
Prepare for birth
Check equipment and medications
Baby born
Give uterotonic within 1 min
Oxytocin 10 IU IM or IV
or Carbetocin/HSC 100 µg IM or IV
or Misoprostol 400-600 µg PO
Assess and record
Uterine tone
Blood loss and flow
BP and pulse
Be alert for PPH
≥ 300 mL and warning sign
or
≥ 500 mL
or
Clinical judgment
Start measuring blood loss
Cut the cord between 1–3 min
Perform controlled cord traction
RECORD EVERY 15 MIN
PPH? START BUNDLE
Placenta out?





RECORD EVERY 15 MIN

Cut the cord between 1–3 min

Perform controlled cord traction

PPH? START BUNDLE

Placenta out?

Out

Not out after 15 min

Empty bladder

Repeat controlled cord traction

Placenta out?

Out

Check tone

Massage if soft

Check bleeding

Not out after 30 min

Check placenta

Incomplete

Remove manually

Complete

Concerns?

No

Check for tears and repair

Yes

Continue care

Monitor bleeding

Check tone and vital signs

Encourage breastfeeding

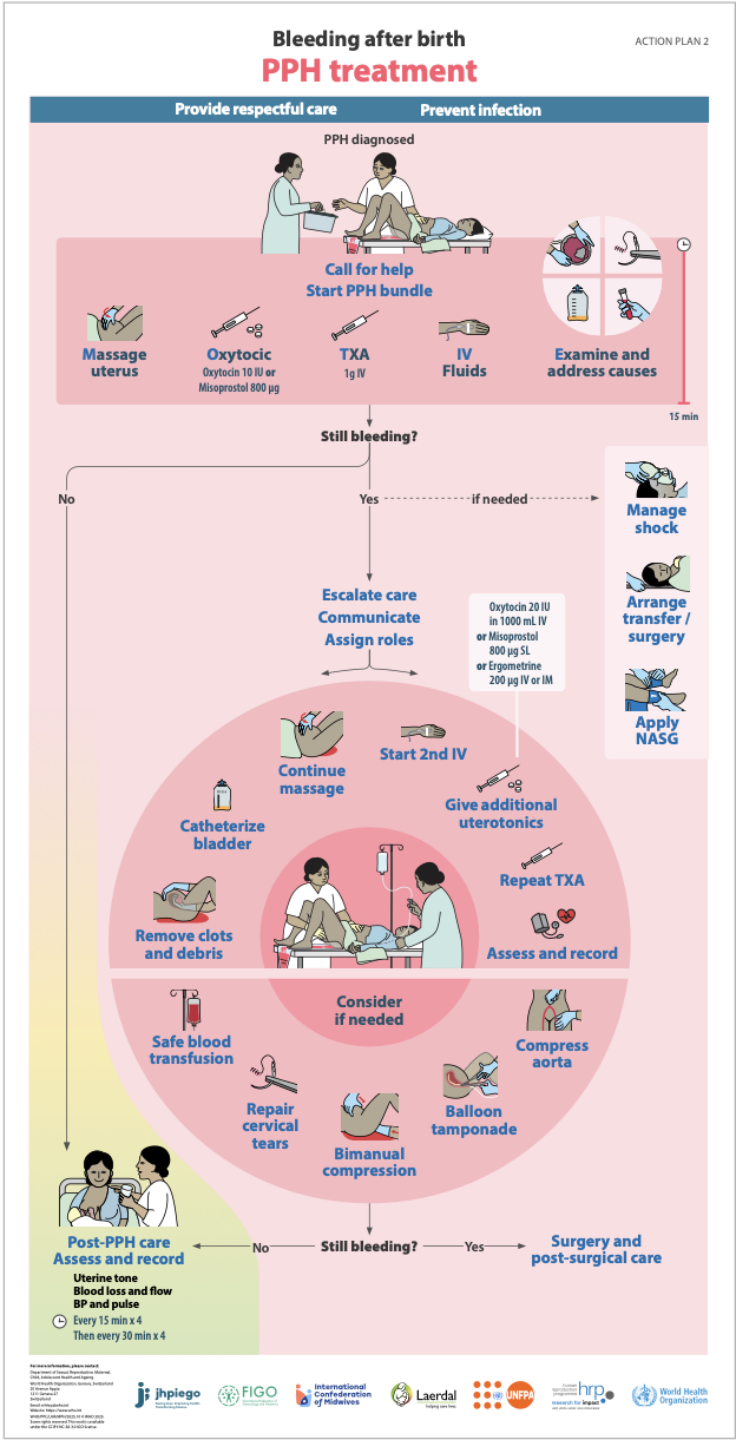
Seek advanced care

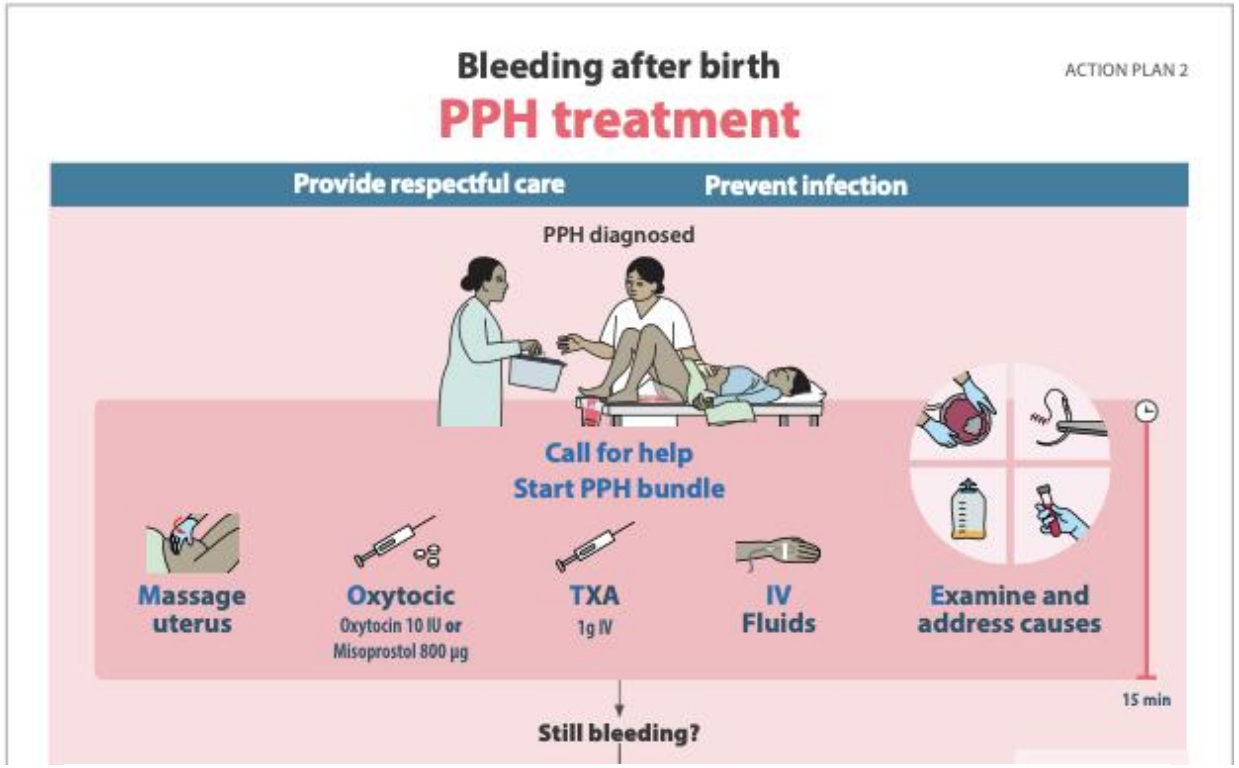
RECORD EVERY 15 MIN

PPH? START BUNDLE

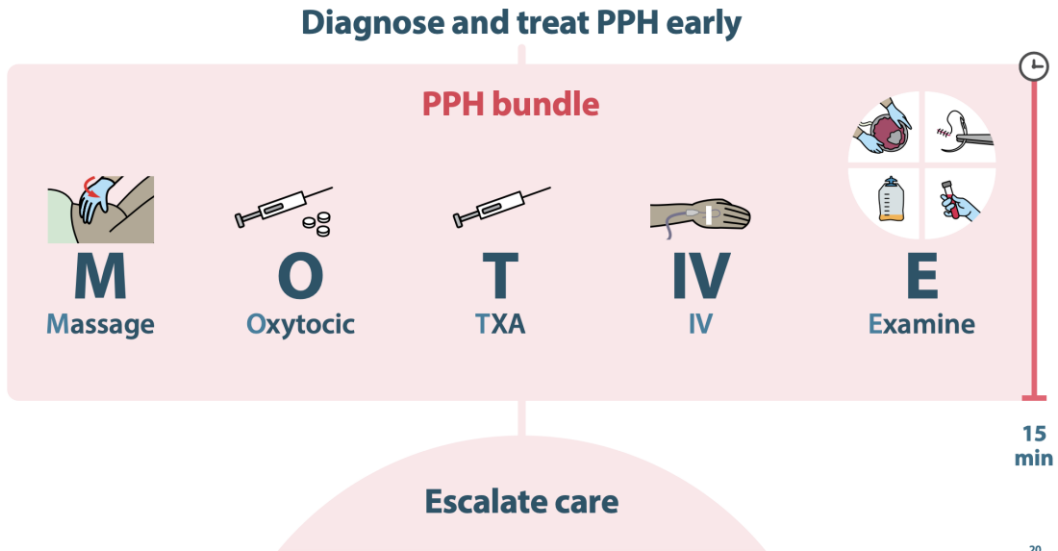
RECORD EVERY 15 MIN

PPH? START BUNDLE

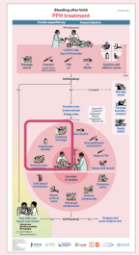




Treatment with the PPH bundle



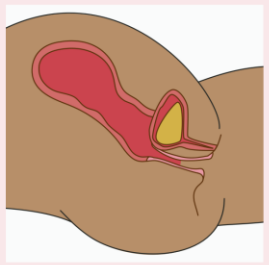
PPH Treatment

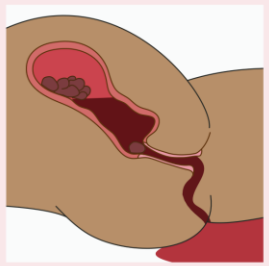


Health worker 1

Continue massage, catheterize bladder, remove clots/debris







15 min

Still bleeding?

No

Yes ---------- if needed ----------

Manage shock

Arrange transfer / surgery

Apply NASG

Escalate care
Communicate
Assign roles

Oxytocin 20 IU in 1000 mL IV
or Misoprostol 800 µg SL
or Ergometrine 200 µg IV or IM

Continue massage

Start 2nd IV

Catheterize bladder

Give additional uterotonics

Repeat TXA

Remove clots and debris

Assess and record

Consider if needed

Safe blood transfusion

Compress aorta

Repair cervical tears

Balloon tamponade

Bimanual compression

Post-PPH care
Assess and record

Uterine tone
Blood loss and flow
BP and pulse

Every 15 min x 4
Then every 30 min x 4

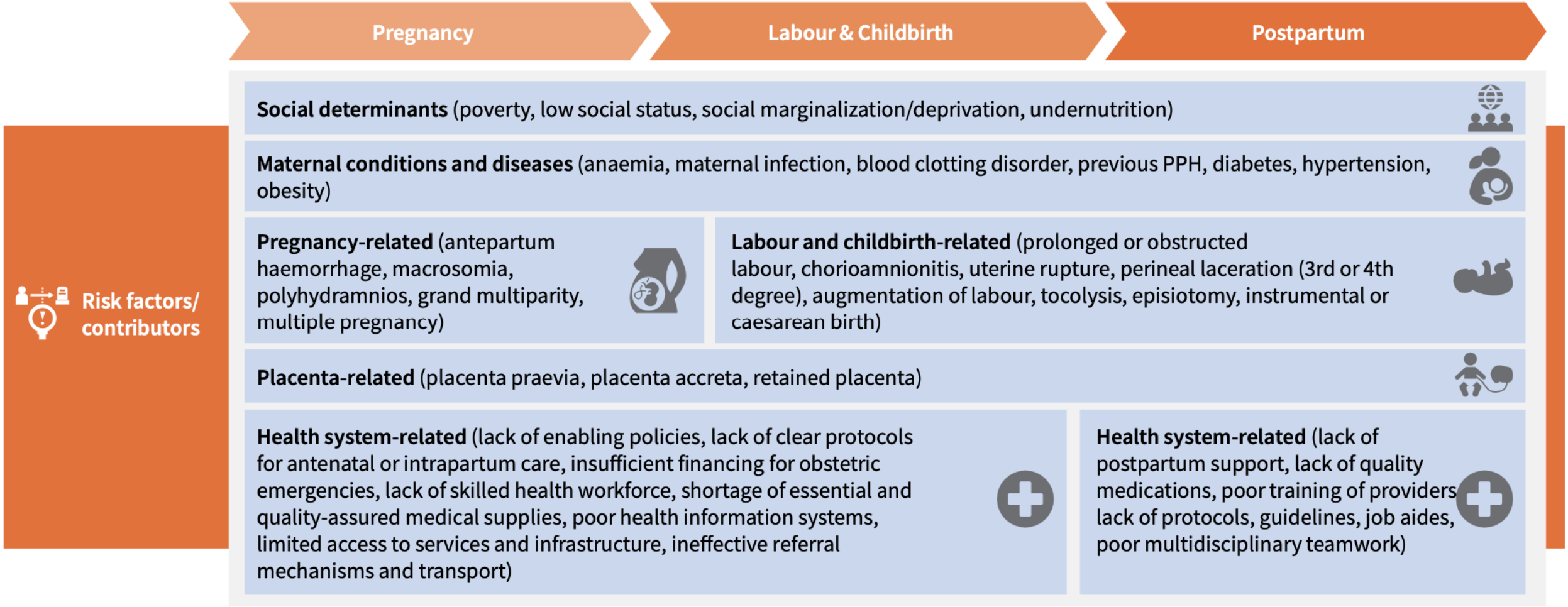
No

Still bleeding?

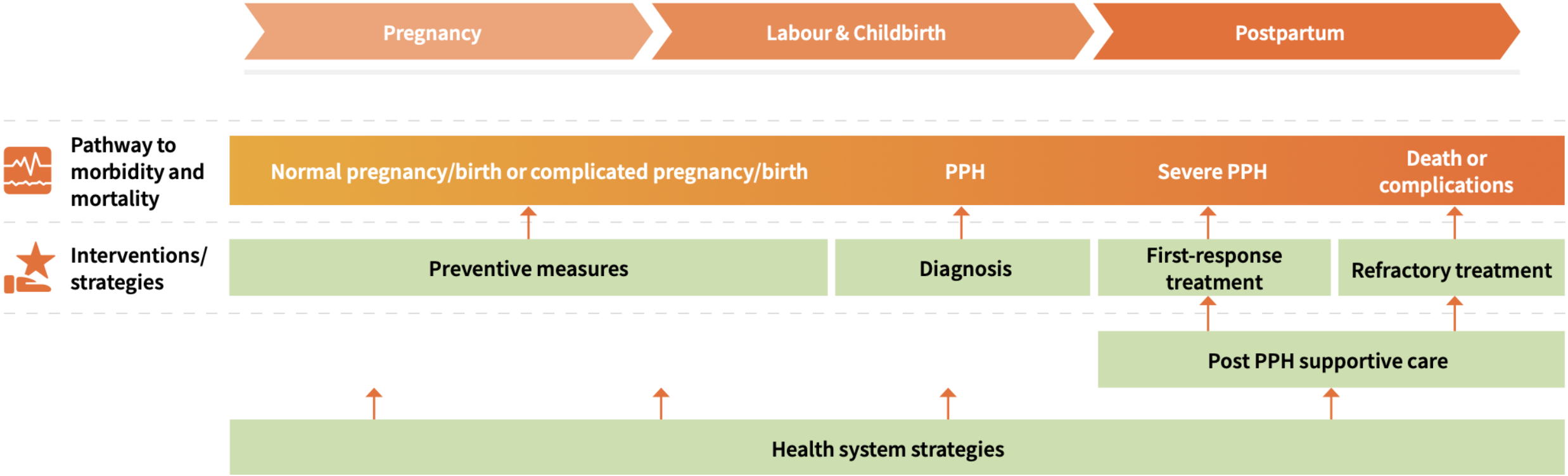
Yes

Surgery and post-surgical care

Framework for reducing postpartum haemorrhage (PPH) morbidity and mortality



Framework for reducing postpartum haemorrhage (PPH) morbidity and mortality



แนวทางเวชปฏิบัติของราชวิทยาลัยสูตินรีแพทย์แห่งประเทศไทย (RTCOG CPG)

ราชวิทยาลัยสูตินรีแพทย์แห่งประเทศไทย
The Royal Thai College of Obstetricians and Gynaecologists

การศึกษาและการฝึกอบรม | งานประชุมวิชาการ | แนวทางเวชปฏิบัติ (Guideline) | สาระสุขภาพ | เกี่ยวกับเรา | Thai J Obstet Gynaecol (TJOG)

แนวทางเวชปฏิบัติของราชวิทยาลัยสูตินรีแพทย์แห่งประเทศไทย (RTCOG Clinical Practice Guideline)

Clinical Practice Guidelines Issue Vol. 5

การป้องกันและรักษาภาวะตกเลือดหลังคลอด (Prevention and Management of Postpartum Hemorrhage)
OB 68-041

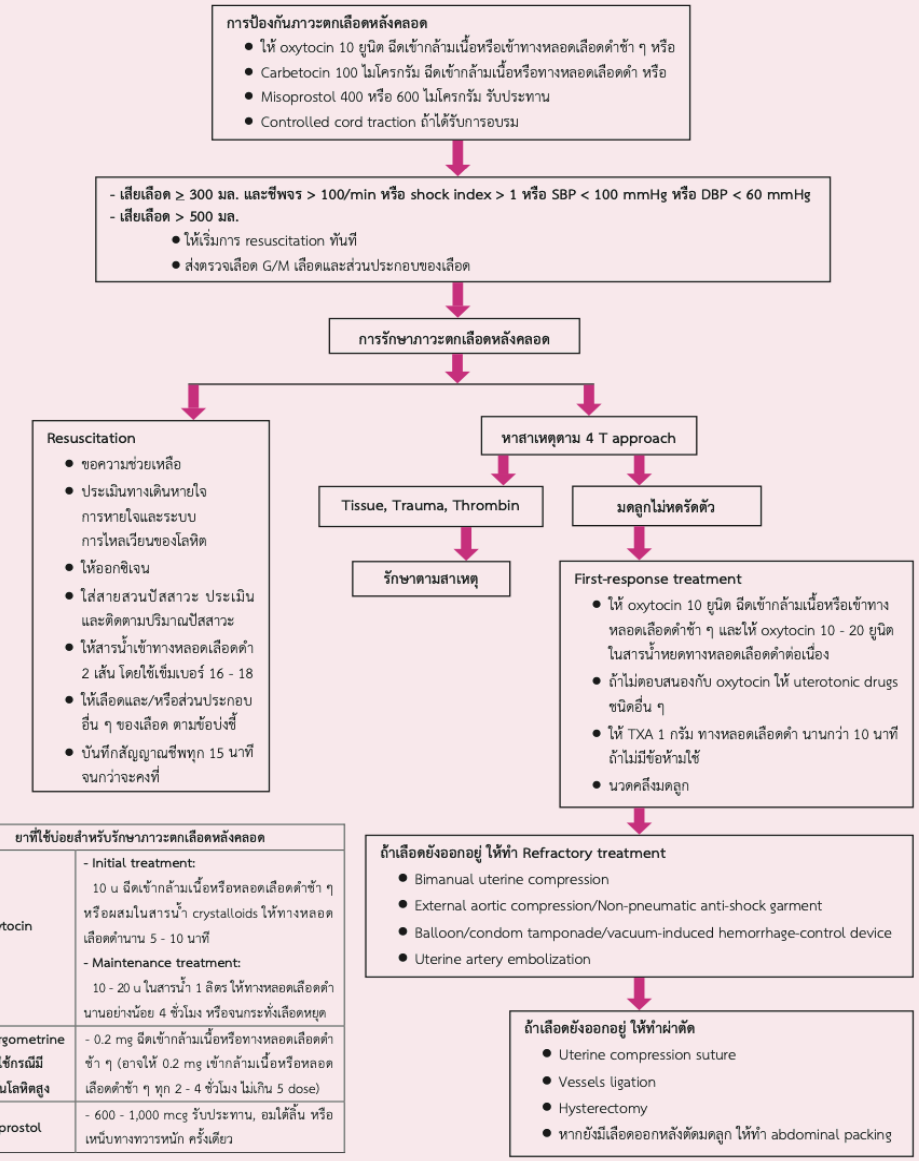
การป้องกันและรักษาภาวะตกเลือดหลังคลอด Prevention and Management of Postpartum Hemorrhage

แนวทางเวชปฏิบัติของราชวิทยาลัยสูตินรีแพทย์แห่งประเทศไทย
เรื่อง การป้องกันและรักษาภาวะตกเลือดหลังคลอด
RTCOG Clinical Practice Guideline
Prevention and Management of Postpartum Hemorrhage

เอกสารหมายเลข	OB 68 - 041 (ใช้แทนเอกสารหมายเลข OB 63 - 020)
จัดทำโดย	คณะอนุกรรมการมาตรฐานวิชาชีพ พ.ศ. 2568 - 2570
วันที่อนุมัติต้นฉบับ	21 พฤศจิกายน พ.ศ. 2568

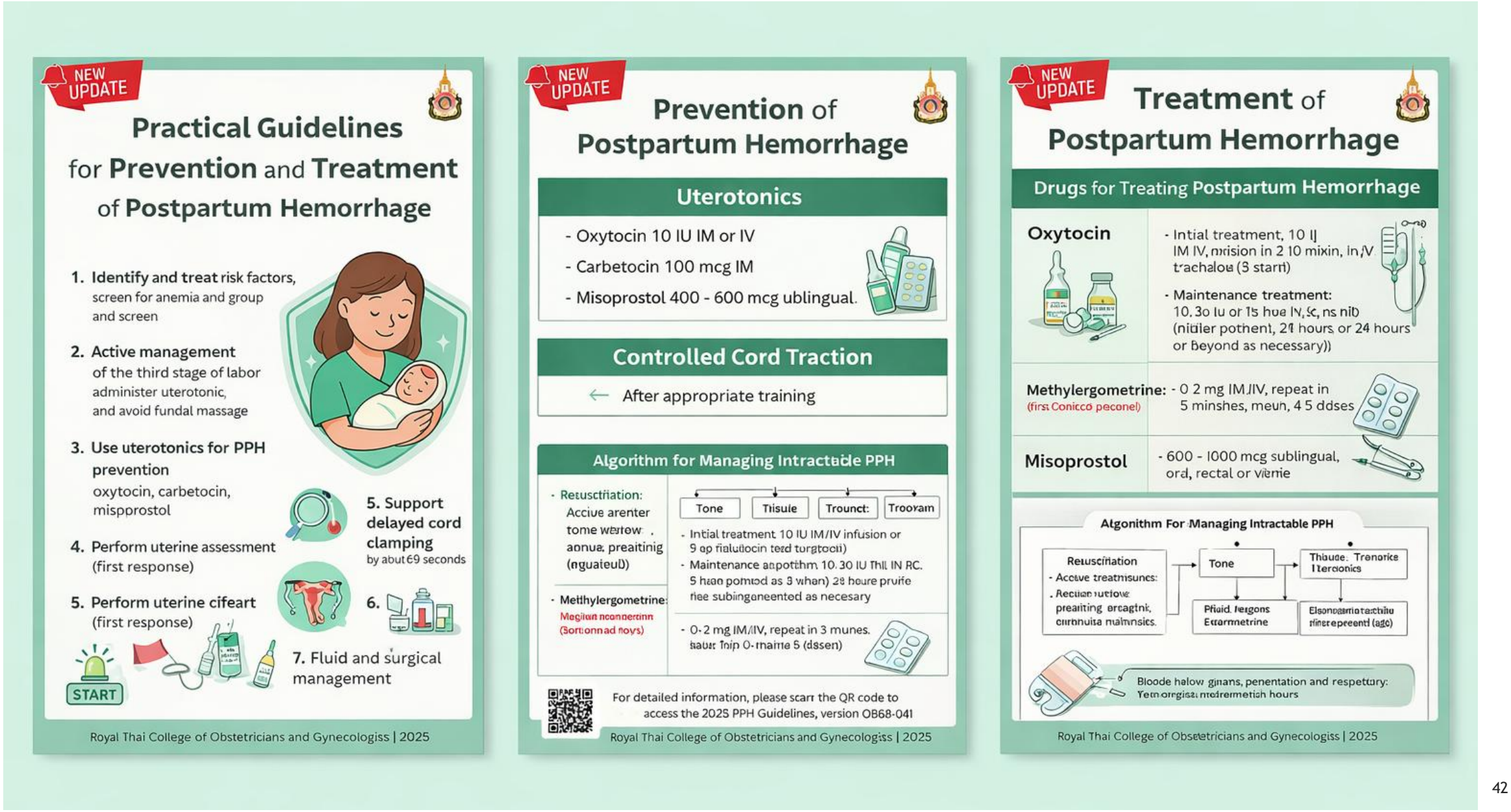
World Health Organization | FIGO International Federation of Gynecology and Obstetrics | International Confederation of Midwives

RTCOG CPG for Prevention and Management of Postpartum Hemorrhage
การป้องกันและรักษาภาวะตกเลือดหลังคลอด



ยาที่ใช้บ่อยสำหรับรักษาภาวะตกเลือดหลังคลอด	
Oxytocin	- Initial treatment: 10 u ฉีดเข้ากล้ามเนื้อหรือหลอดเลือดดำช้า ๆ หรือผสมในสารน้ำ crystalloids ให้ทางหลอดเลือดดำนาน 5 - 10 นาที - Maintenance treatment: 10 - 20 u ในสารน้ำ 1 ลิตร ให้ทางหลอดเลือดดำนานอย่างน้อย 4 ชั่วโมง หรือจนกระทั่งเลือดหยุด
Methylergometrine *ห้ามใช้กรณีมีความดันโลหิตสูง	- 0.2 mg ฉีดเข้ากล้ามเนื้อหรือทางหลอดเลือดดำช้า ๆ (อาจให้ 0.2 mg เข้ากล้ามเนื้อหรือหลอดเลือดดำช้า ๆ ทุก 2 - 4 ชั่วโมง ไม่เกิน 5 dose)
Misoprostol	- 600 - 1,000 mcg รับประทาน, อมใต้ลิ้น หรือเหน็บทางทวารหนัก ครั้งเดียว

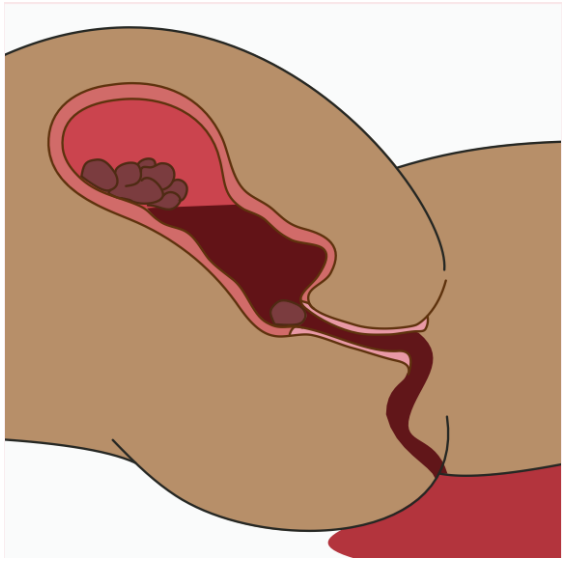
Update the Thailand PPH Guideline 2026

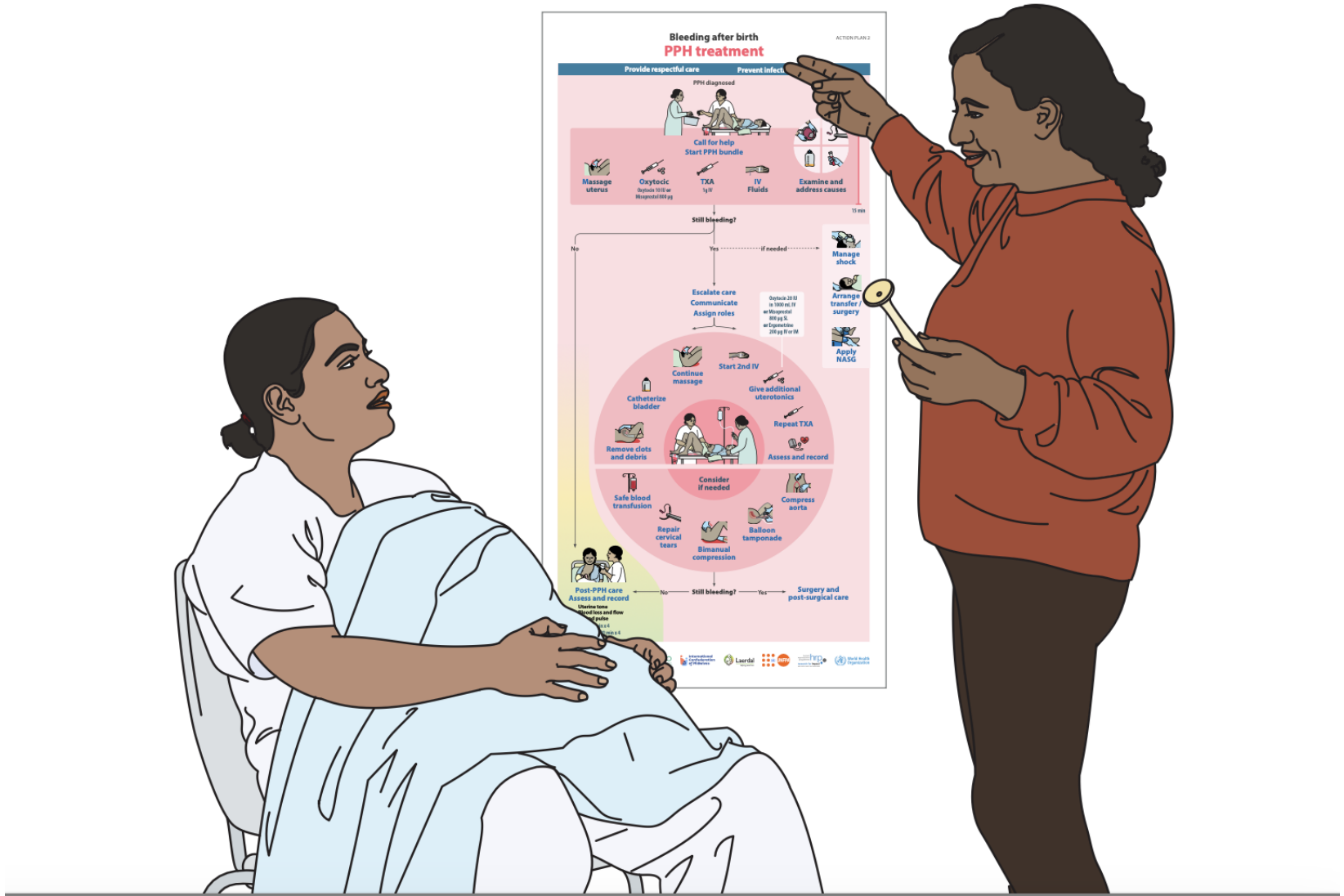


Ongoing practice and quality improvement

“ Ending postpartum hemorrhage is not the work of one person.

It is the power of an **effective team**, **working together** for every mother and begin with **what we do today**”



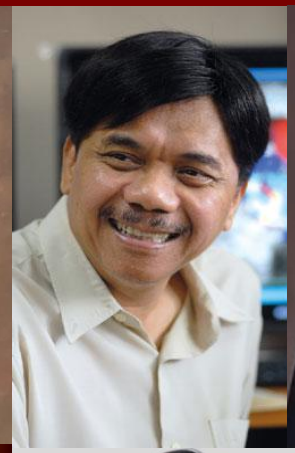


กรรมการบริหาร
ราชวิทยาลัยสูตินรีแพทย์แห่งประเทศไทย 2568-2570

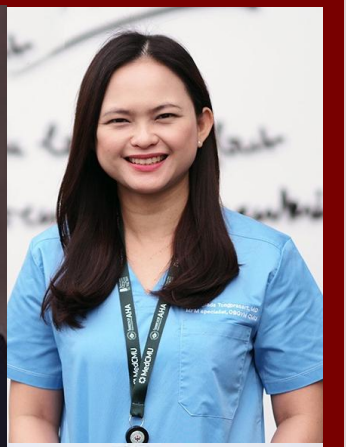
คณะอนุกรรมการมาตรฐานวิชาชีพ
ราชวิทยาลัยสูตินรีแพทย์แห่งประเทศไทย 2568-2570



















#WorldPPHDay

World Postpartum Haemorrhage Day

Make postpartum haemorrhage everyone's business.