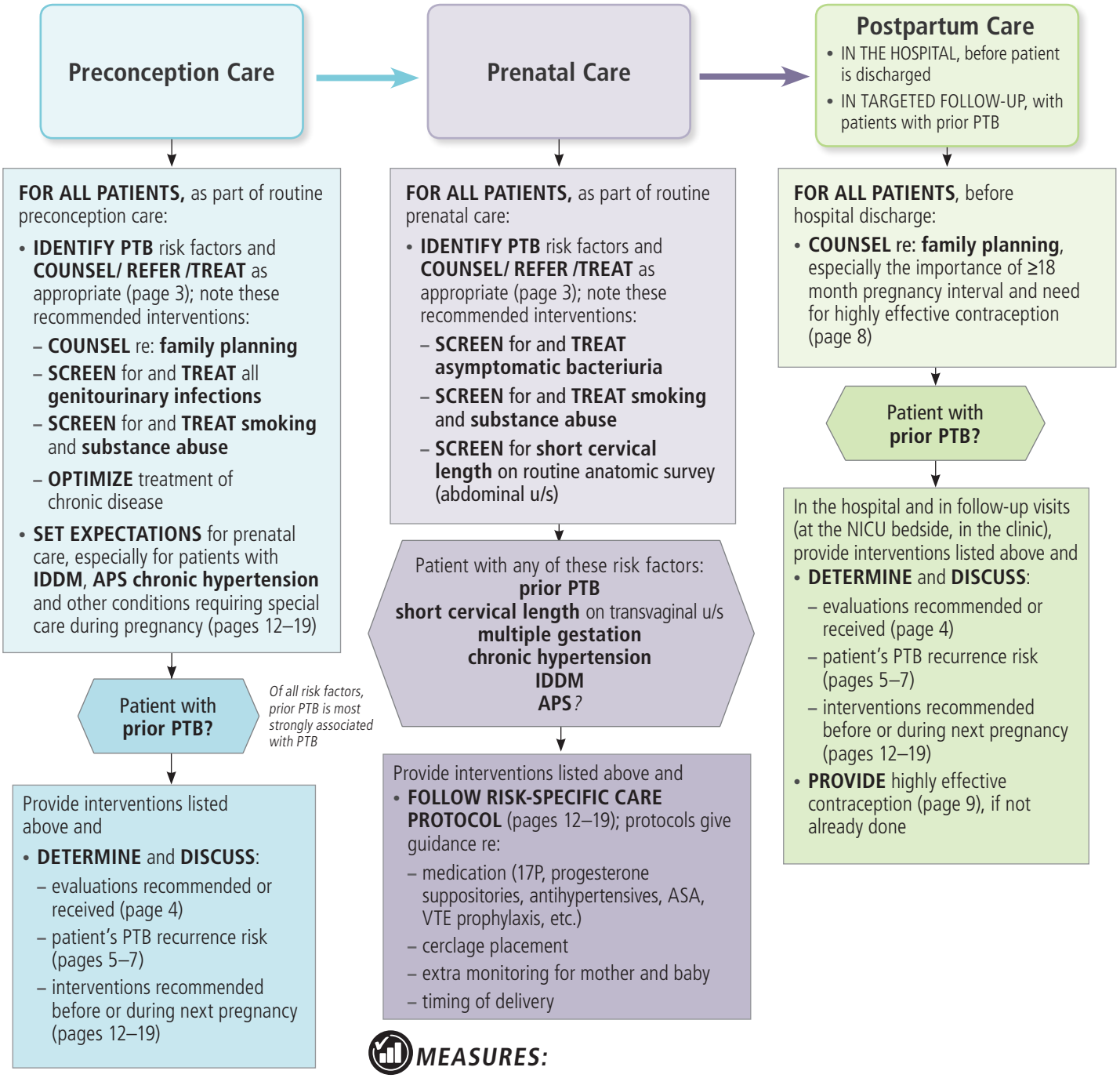
▸ **Click here** to view the complete care process model, ***Prevention and Management of Preterm Birth (Spontaneous and Indicated)***

▸ PTB PREVENTION MAP

Most preterm birth occurs among women with no known risk factors — and there are few interventions proven effective to address known risks.[10,11] Nevertheless, recent studies show that targeted prevention efforts can yield positive results and that even a modest reduction in PTB has significant impact, improving lives and lowering costs.[7,9, 12-16] **The map below outlines how Intermountain pursues this reduction, by focusing on key moments of contact with patients before, during, and after pregnancy; identifying PTB risk factors as early as possible; and aggressively providing best-practice interventions to lower risk and improve outcomes.** The map also identifies the measures we'll use to assess practice and document the impact of implementing the model across the Intermountain system.



MEASURES:

- **Screen for short cervix** on routine anatomic survey (all patients)
- **Provide progesterone** as appropriate (patients with prior PTB and/or short cervix)
- **Offer cervical cerclage** as appropriate (patients with short cervix)

*Preventive care supported by **INTERMOUNTAIN PATIENT EDUCATION:** See page 25 for a list of relevant materials for patients and families*

PTB Risk Factors and Interventions

The table below lists risk factors and preventive interventions for spontaneous and indicated preterm birth. Note that there are often multiple associations between risk factors and that for most of these factors, no PTB interventions are supported by evidence.

- Factors in **boldface** are most strongly associated with PTB.[2,10,17]
- Factors in gray shaded areas have preventive interventions recommended in this CPM.

RISK FACTORS for spontaneous or indicated PTB		✓ RECOMMENDED PREVENTIVE INTERVENTIONS
Family planning	**Interpregnancy interval <6 months** **Maternal age <18 or >40** Treatment for infertility	• In preconception and postpartum contact, counsel on family planning, especially the need for highly effective contraception and the benefits of an **interpregnancy interval** ≥18 months (page 9). • For infertility treatment, implement measures to reduce chance of **multiple gestation** (page 10).
Infection	**Asymptomatic bacteriuria** **Other genitourinary infections,** including **bacterial vaginosis,** other STIs Pyelonephritis Appendicitis Pneumonia Systemic infection	• At a preconception consult, screen for and treat all **genitourinary infections**, including STIs. • In prenatal care: – Screen all patients for **asymptomatic bacteriuria** in first trimester (urine culture); treat all cases. – Screen for **bacterial vaginosis** in all patients with prior PTB, and treat all cases. BV increases the risk of PTB by almost 300%.[2] – Treat other infections selectively; most studies show no reduction in PTB with treatment, though it may be recommended to prevent other maternal/fetal complications. Note that you should NOT treat trichomoniasis in pregnancy; treatment increases PTB risk.[10]
General maternal health, lifestyle	**Smoking** **Substance abuse** **Chronic hypertension** **IDDM** (insulin-dependent diabetes) **APS** (antiphospholipid antibody syndrome) **Poor nutrition, either low or high BMI** **Periodontal disease** **Anemia** (but not in 3rd trimester) **Low socioeconomic status, education** **Inadequate prenatal care** Anxiety, depression Life events (divorce/separation, death)	• At a preconception consult: – Screen for risk factors such as **smoking** and **substance abuse;** treat/refer as needed (page 11). – For patients with **IDDM**, **APS**, or **other chronic condition**, optimize management (may need to consult with other providers to adjust treatment plan). • In prenatal care: – Provide **smoking** cessation counseling and referrals; refer for **substance abuse** counseling (page 11). Cocaine and opioid use are strongly associated with PTB. – Follow care protocols for patients with: › **Chronic hypertension:** BP monitoring and antihypertensive therapy initiated as needed; possible medication for fetal benefit; fetal surveillance (page 16) › **IDDM**: frequent monitoring of BG and BP; optimizing DM control and initiating antihypertensive medication as needed; fetal surveillance; possible medication for fetal benefit (page 17) › **APS**: BP monitoring and antihypertensive medication as needed; low-dose ASA; VTE prophylaxis, fetal surveillance (page 19)
Pregnancy, reproductive history and health	**Prior preterm delivery** **Short cervix on transvaginal ultrasound (TVU)** **Multiple gestation** **Uterine anomaly, leiomyoma** **History of cervical surgery, anomaly** **Polyhydramnios** History of second trimester abortion Family history of PTB (first-degree relative) Excessive uterine contractility Placenta previa or placental abruption Vaginal bleeding, esp. after 1st trimester Abdominal surgery Fetal growth restriction Fetal anomaly	• In prenatal care: – Screen for **short cervical length** at time of fetal anatomic survey at 18–20 weeks gestation; if <3 cm, schedule TVU – Follow care protocols for patients with: › **Prior spontaneous PTB**: 17P initiated at 16 weeks; possible cerclage; possible antibiotics, tocolysis, possible medication for fetal benefit (page 13) › **Prior indicated PTB due to preeclampsia**: BP monitoring and antihypertensive therapy initiated as needed; low-dose ASA; possible heparin; possible medication for fetal benefit; fetal surveillance (page 14) › **Short cervix:** vaginal progesterone (suppositories or gel); possible inpatient observation; possible cerclage; possible medication for fetal benefit (page 15) › **Twins:** confirm placentation (TTTS checks twice monthly if mono/di); TVUs; fetal growth assessment; BP monitoring with antihypertensive therapy as needed; possible steroids; fetal surveillance (page 18)
Ethnicity	**African-American**	