A quick guide to management of clients at the High Risk Obstetrics Clinic at Tygerberg Hospital.

- The high risk clinic is the **only specialist referral clinic** for pregnant clients from the Metro East health district of Cape Town. Within this drainage, there are several Basic Antenatal Care clinics [BANC] (they only do first bookings, and follow up of low-risk pregnant women); 8 Midwife Obstetric Units [MOUs] (they conduct deliveries of low-risk women as well as antenatal and postnatal care for low risk women), one small district hospital (Helderberg [HH]) and two larger district hospitals (Khayelitsha [KDH] and Karl Bremer [KBH]) that have 24 hour caesarean section [CS] capabilities.
- The maternity service is **regionalised**, meaning that low risk women are managed at clinic level, intermediate (Level 1) risk woman are managed at medical officer level (district hospitals) and high risk (level 2) woman (specialist referrals) are managed at Tygerberg high risk clinic. Women needing subspecialist (tertiary)/Level 3 care are managed at special clinics (fetal medicine, special care, diabetic clinic or cardiac clinic).
- Care is sometimes shared between levels, with only key visits at the high risk clinic (this is explained in each protocol).

The different levels of care is explained in appendix A.

Write the level of care for Antenatal care and Delivery on the **front page** of the Maternity Case Record (note that this can change during the antenatal period):

LEVEL OF CARE	
Antenatal clinic:	**Delivery site:**
Transport when in labour:	

- All **level 1 patients must be referred to their nearest clinic** for follow up visits. **High risk (level 2)** and **Special care (level 3 patients)** are followed up at **Tygerberg Hospital**.
- **Level 2 patients residing outside of metro east** can be followed at the outreach clinics of the regional hospitals (Paarl or Worcester). This information must appear on the antenatal card.
- **Level 3 patients from rural towns** can be seen at the rural outreach clinics in conjunction with their local health care workers (outreach specialist clinics) as long as there is a clear plan from TYGERBERG HOSPITAL regarding follow up and delivery noted on the antenatal card.

All the clinics in the drainage area is available in appendix B.

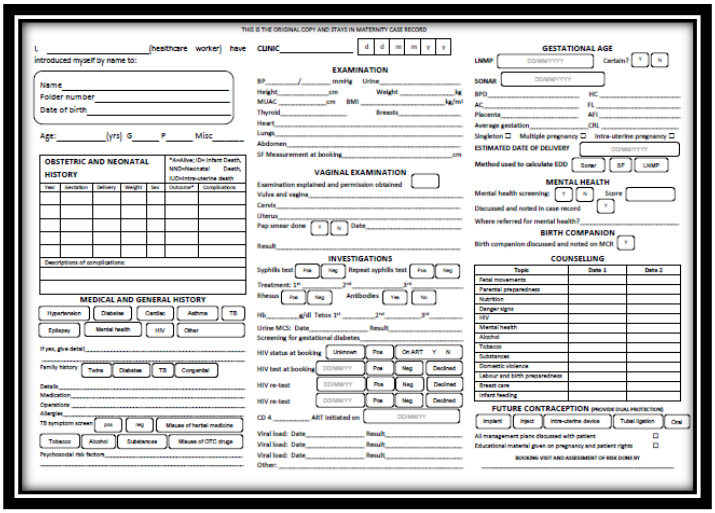
- ALL PREGNANT PATIENTS must have a maternity case record [MCR] that remains with the patient when she goes home. Please remind the patient to keep the record with her at all times and to bring it with her to the hospital or clinic.

When you receive a file for a patient to see, proceed as follows:

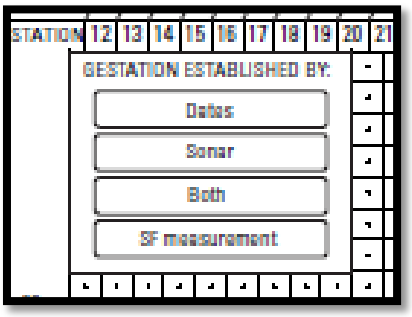
1. Read the observations on the **triage form** and check for major complaints/abnormal observations.

The triage form is shown on page 7

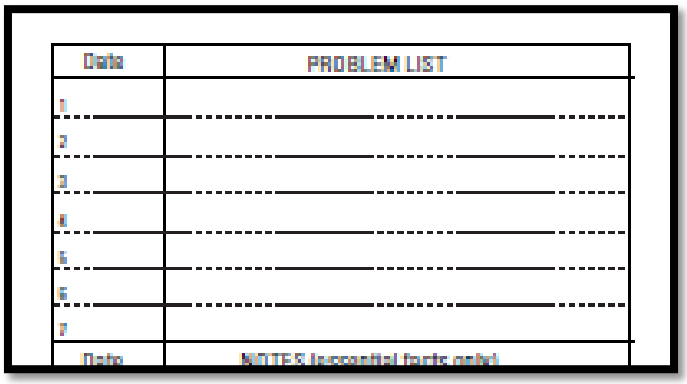
2. Calculate the current gestation correctly **[Ultrasound policy]**; the quickest way is usually by using the EDD of a formal early ultrasound report (<24 weeks). DO THIS WITH every visit, do not rely on the previous calculations.
3. Read/complete **page 10 of the MCR** to determine/calculate the risk(s):
    - Age
    - Gravidity and parity
    - Previous obstetrical history
    - Medical and surgical history
    - Check that a general examination was done and documented (thyroid/breasts/lungs/heart etc). It is only necessary to do this once; if it was not done before do it with this visit and document on this page. It is not required to do a full general examination with every clinic visit; only do this when there are major complaints/abnormal observations or if this is an emergency admission.
    - Calculate BMI correctly **[BMI protocol]**
    - Check that all investigations were done and results available (Rh, Hb, HIV, Syphilis, U-MCS etc) and repeat according to protocol (syphilis at ~32 weeks, HIV with every visit, viral load if HIV positive).
    - Page 10 looks like this:



4. Now go to **page 11** of the MCR: This page **must be completed** with every visit!
    - Plot the current gestation on the antenatal card and write the date on top.
    - If not done before, use this box to indicate which method was used to calculated the gestation:



    - Read the PROBLEM LIST to determine the reason for referral. Also, read all previous notes to see if there are additional problems/previous admissions etc. **At the end of the consultation, <u>update this list to reflect the current situation:</u>**



5. Now call the patient, introduce yourself, and ask about her well-being and any current complaints.
6. Plot the SF measurement, presenting part, head above brim, BP and urine results, HB and fetal movements **on page 11.**
7. **Deal with the presenting complaint(s) according to the appropriate protocols/guidelines or advice from senior colleagues (see p5 for list of major problems).**
8. **Determine an appropriate follow up date at the correct level of care. (Use the care Pathway on p8)**

- All women will come to you with a route slip on the front of their folder. The complete route slip must accompany her to the clerk for a follow up booking.

The route slip is explained on page 6

9. On note keeping: **[policy on note keeping]**
    - **Make sure p10 and p11 is complete. Do not repeat** information already available on p10 and p11 (e.g. age, gravidity, parity, gestation etc) in your additional notes; **only write additional** notes on the presenting complaint, management and follow up plan in the space provided (page 12 or 13 of the MCR- use one block per visit). If this space is already full, use p17).

- **Write the DATE, TIME, PLACE SEEN (HRC) as well as your NAME (clearly written), rank and HPCSA number.** Student notes must include the rank (e.g. SI) as well as a signature from a registered doctor.
- Make cryptic duplicate notes on the **triage form** (this is captured on ECM). This serves as a record of the visit as well as provide backup in case the hand-held MCR is lost. Place these notes in the hospital folder, not in the MCR. Do not discard this page!

Staple any sonar reports to **page 16** and write the measurements in the space provided on page 11 in the GESTATIONAL AGE block.

With EVERY visit:

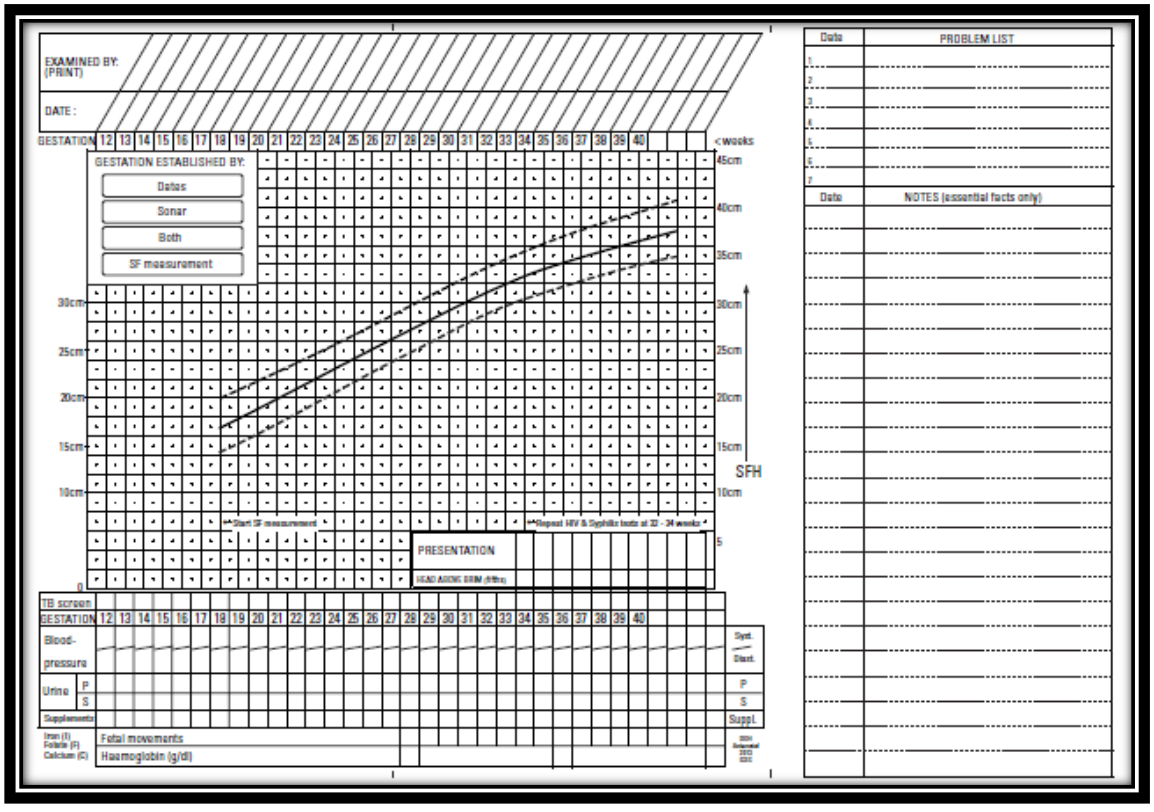
Educate on danger signs and symptoms of pregnancy (use p2 of the MCR for a visual guide):

- Severe headache
- Abdominal pain (not discomfort)
- Drainage of liquor from the vagina
- Vaginal bleeding
- Reduced fetal movements

- Ensure that all medication are used correctly and the patient has enough till her next visit

  The following must be given to all pregnant women:
  - Ferrous sulphate tablets 200 mg daily, to prevent anaemia
  - Folic acid tablets 5 mg daily.

Page 11 looks like this:



Major complaints/conditions

The most important problems seen at the HRC are as follows; please use the appropriate protocol on management (protocols also available at http://www.obstyger.co.za/Protocols.html):

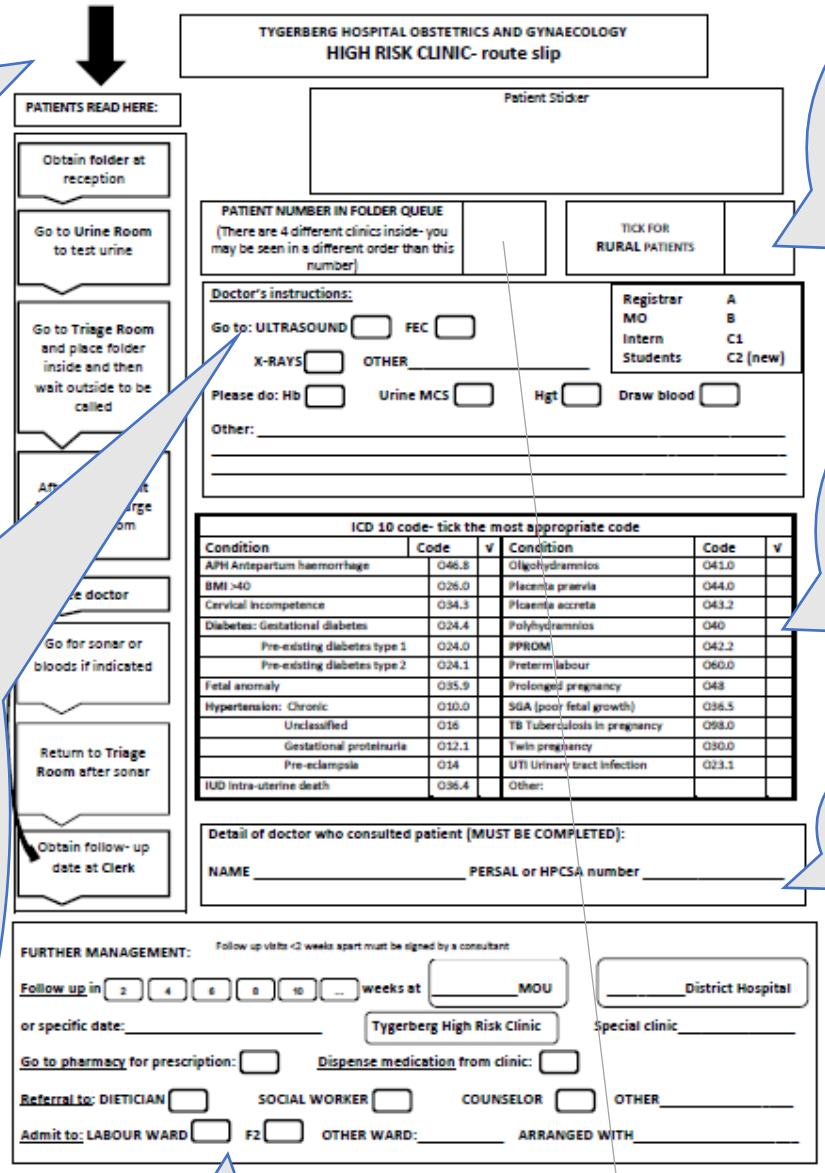
- Increased BMI **[BMI protocol]**
- Hypertensive diseases in pregnancy **[HDP protocol]**
- Gestational diabetes **[Diabetes in pregnancy protocol]**
- Uncomplicated twin pregnancy **[DCDA twin protocol]**
- Risk for preterm labour [Risk for preterm labour protocol]
- Poor growth with normal Doppler **[SGA protocol]**
- Abnormal Doppler **[Abnormal Doppler protocol]**
- Advanced maternal age **[Ultrasound policy]**
- Booking for CS **[CS policy]**
- Induction of labour **[IOL protocol]**

A note on the MINOR complaints of pregnancy [guide to minor discomforts in pregnancy]

Most women will complain about some of the minor complaints. It is important to listen to her, counsel on appropriate advice and re-assurance that this will get better after the pregnancy. It is not needed to document all of these complaints in your notes, but distinguish the minor (physiological) complaints from serious conditions.

Gastro-oesophageal reflux / heartburn
Varicose veins and leg oedema
Carpel tunnel syndrome
Haemorrhoids
Leg cramps
Nausea and vomiting
Sleep disturbance
Vaginal discharge
Pelvic girdle and low back pain

ROUTE SLIP



TYGERBERG HOSPITAL OBSTETRICS AND GYNAECOLOGY
HIGH RISK CLINIC- route slip

PATIENTS READ HERE:

Obtain folder at reception

Go to Urine Room to test urine

Go to Triage Room and place folder inside and then wait outside to be called

Go for sonar or bloods if indicated

Return to Triage Room after sonar

Obtain follow- up date at Clerk

Patient Sticker

PATIENT NUMBER IN FOLDER QUEUE
(There are 4 different clinics inside- you may be seen in a different order than this number)

TICK FOR RURAL PATIENTS

Doctor's instructions:

Go to: ULTRASOUND FEC
X-RAYS OTHER
Please do: Hb Urine MCS Hgt Draw blood
Other:

Registrar	A
MO	B
Intern	C1
Students	C2 (new)

ICD 10 code- tick the most appropriate code

Condition	Code	√	Condition	Code	√
APH Antepartum haemorrhage	O46.8		Oligohydramnios	O41.0	
BMI >40	O26.0		Placenta praevia	O44.0	
Cervical incompetence	O34.3		Placenta accreta	O43.2	
Diabetes: Gestational diabetes	O24.4		Polyhydramnios	O40	
Pre-existing diabetes type 1	O24.0		PPROM	O42.2	
Pre-existing diabetes type 2	O24.1		Preterm labour	O60.0	
Fetal anomaly	O35.9		Prolonged pregnancy	O48	
Hypertension: Chronic	O10.0		SGA (poor fetal growth)	O36.5	
Unclassified	O16		TB Tuberculosis in pregnancy	O98.0	
Gestational proteinuria	O12.1		Twin pregnancy	O30.0	
Pre-eclampsia	O14		UTI Urinary tract infection	O23.1	
IUD Intra-uterine death	O36.4		Other:		

Detail of doctor who consulted patient (MUST BE COMPLETED):

NAME PERSAL or HPCSA number

FURTHER MANAGEMENT: Follow up visits <2 weeks apart must be signed by a consultant

Follow up in 2 4 6 8 10 ... weeks at MOU District Hospital
or specific date: Tygerberg High Risk Clinic Special clinic
Go to pharmacy for prescription: Dispense medication from clinic:
Referral to: DIETICIAN SOCIAL WORKER COUNSELOR OTHER
Admit to: LABOUR WARD F2 OTHER WARD: ARRANGED WITH

This explains the flow through the clinic

Rural patients are seen first, as they are dependent on transport.

You must tick one ICD-10 code. A complete list of codes is on the notice board

Your name and HPCSA number is compulsory

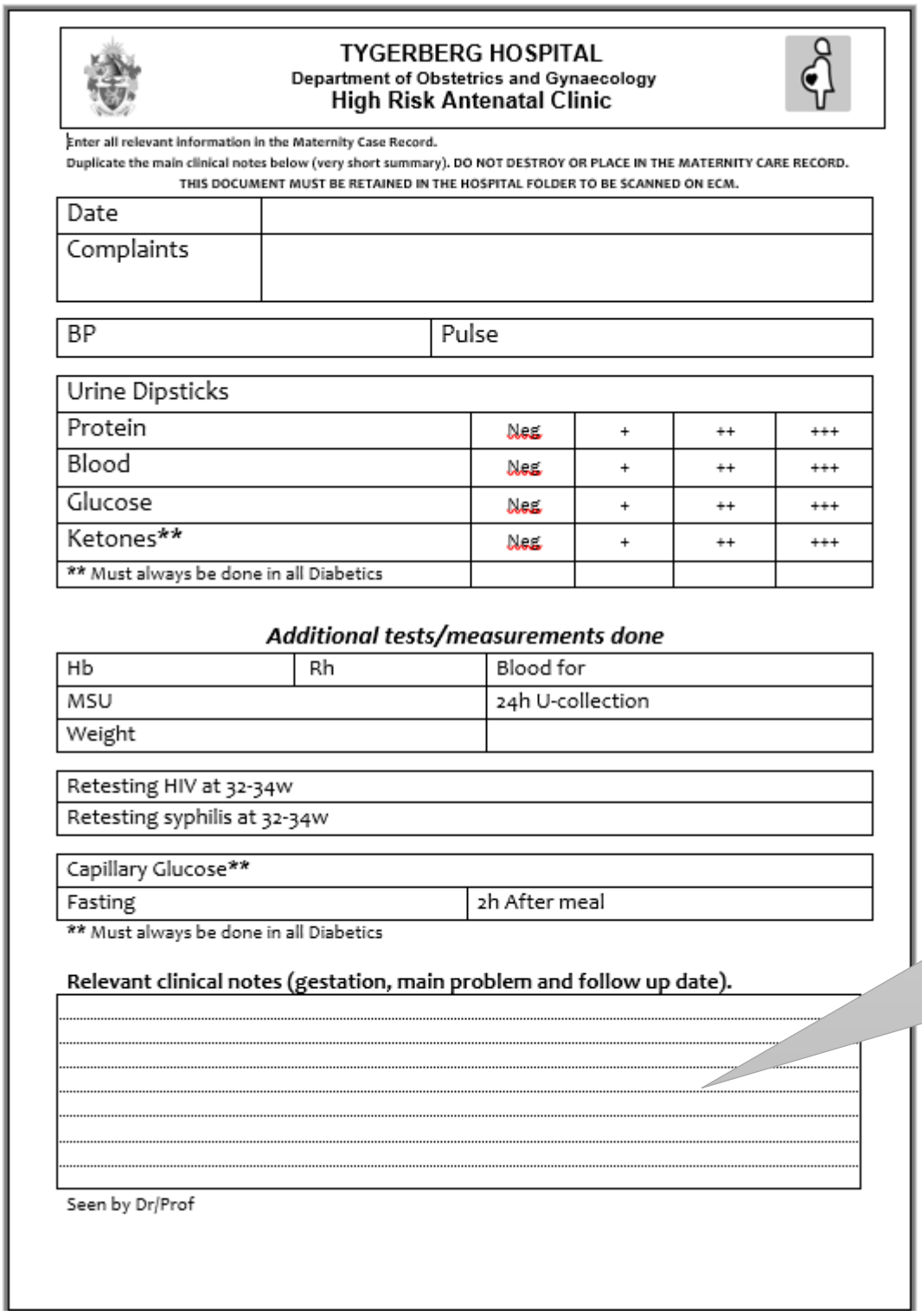
Tick here if a patient has to go to sonar or fetal evaluation clinic. KEEP THE ROUTE SLIP IN THE CLINIC on the front counter so that you know she is still coming back. On return, put the route slip back on the folder

See local patients with lowest number first.

Complete this part (further management) in full. Make sure follow-up date is at the correct gestation and clinic or hospital. DO not automatically make a booking for Tygerberg- first check is the client can be managed at another level of care.

TRIAGE FORM

All women will be triaged by the sisters first. They will come to you with this form completed:



TYGERBERG HOSPITAL
Department of Obstetrics and Gynaecology
High Risk Antenatal Clinic

Enter all relevant information in the Maternity Case Record.
Duplicate the main clinical notes below (very short summary). DO NOT DESTROY OR PLACE IN THE MATERNITY CARE RECORD.
THIS DOCUMENT MUST BE RETAINED IN THE HOSPITAL FOLDER TO BE SCANNED ON ECM.

Date	
Complaints	

BP	Pulse

Urine Dipsticks				
Protein	Neg	+	++	+++
Blood	Neg	+	++	+++
Glucose	Neg	+	++	+++
Ketones**	Neg	+	++	+++
** Must always be done in all Diabetics				

Additional tests/measurements done

Hb	Rh	Blood for
MSU		24h U-collection
Weight		

Retesting HIV at 32-34w
Retesting syphilis at 32-34w

Capillary Glucose**	
Fasting	2h After meal

** Must always be done in all Diabetics

Relevant clinical notes (gestation, main problem and follow up date).

Seen by Dr/Prof

Remember to make duplicate clinical notes here

Typical frequency of visits

Low risk women receive eight visits during pregnancy:

Booking, 20 weeks, 26 weeks, 30 weeks, 32 weeks, 34 weeks, 36 weeks, 38 weeks, 40 weeks.

- **Visits for BP/Urine dipsticks and SF growth only can be scheduled at a lower level clinic**
- **Adjust the frequency of visits according to the clinical problem (use the appropriate guideline). Visits less than two weeks apart (outside of a protocol) have to be discussed with the consultant.**

Key visits

First full assessment at TBH	Review and complete MCR Do risk assessment and reason(s) for attending Tygerberg Hospital
NT Scan 10-13w	Offer to women that qualify according to Ultrasound criteria If CRL 45-84mm Not necessary for HRC visit on this day, except if referred by sonar
Detail Scan 18-20w	Offer to all patients (book at x5572 for women who will remain at High Risk; those that will be referred back can get a detail scan at their local hospital/clinic)
Cervical Evaluations 16-26w (2 weekly)	For all women with previous preterm birth (use Risk of preterm labour protocol) 2 weekly ultrasound cervical length measurement and management according to findings
UAD (At FEC) 26w	Offer to all women with: Current: Diabetes, hypertension, autoimmune disease, BMI≥40 Previous: Pre-eclampsia, Eclampsia, Preterm Birth, SGA, Abruptio or Stillbirth
Glucose Profile 26w	For all women with age ≥ 40y, BMI ≥ 40 or with previous: macrosomia, GDM, shoulder dystocia, Stillbirth of unknown cause
Cervical Evaluations 26-32w	For all women with previous preterm birth 2 weekly clinical vaginal examination to do cervical evaluations (use Risk for Preterm birth protocol)
32 weeks	Syphilis repeat test on venous blood (laboratory)
34 weeks	Informal growth scan and UA Doppler for all diabetic women (34 weeks)
36 weeks	Anaesthetic appointment for BMI>45 Growth scan for BMI>45 where it is not clinically possible to determine fetal size (risk for SGA) Ensure all women have a birth/delivery plan, have chosen a birth partner and have decided on future contraceptive options
38-40 weeks	Review for delivery (diabetes, hypertension, previous stillbirth etc- use appropriate protocol)
41 weeks	Offer IOL/delivery to all women with a sure gestation after 41 weeks.