# IMPORTANT CHANGES TO ULTRASOUND ASSESSMENT AND POSTNATAL

## MANAGEMENT OF ANTENATALLY DETECTED FETAL RENAL DILATION

This document is for ultrasound providers, lead maternity carers, general practitioners and paediatric specialists.

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A new New Zealand guideline has been developed to better manage antenatally detected fetal renal dilatation. This guideline aims to better differentiate between those at low risk and those at high risk of surgically significant dilation, better directing those at high risk to appropriate specialist care and reducing the number of scans for those at low risk.

This new pathway adopts the international Urinary Tract Dilation classification system, updating and standardising the approach to diagnosing, describing, grading and monitoring fetal renal dilation.

To provide uniformity and continuity of care with improved communication, it is important that all ultrasound providers, Lead Maternity Carers, General Practitioners, and paediatricians follow this new pathway.

Urinary Tract Dilation (UTD) Classification System				
Increasing Severity				
Antenatal	A1	A2	A3	
Postnatal	P1	P2	Р3	
The grading severity is primarily based on the Anteroposterior Renal Pelvis Diameter (AP-RPD) but also considers peripheral calyceal or ureteric dilation, parenchymal abnormalities, oligohydramnios and bladder abnormalities				
Full details of the grading system are included in the flow diagram and consensus document				
Modified from Nguyen et al 2014, Journal of Paediatric Urology				

### **Key Considerations**

- All antenatal and postnatal ultrasound providers must assess the above features, report on pertinent positives and negatives and use the above grading classification in reports
- This pathway only applies to asymptomatic, uncomplicated dilation. Complications such as infection or anatomically anomalous kidneys such as duplex, single, horseshoe or multicystic dysplastic kidneys are not included in this pathway. Pathways for these issues are held elsewhere
- Low risk mild isolated renal pelvis dilatation (A1 and P1) can be managed between the reporting radiologist and the referring LMC or GP, using the pathway to determine follow up, and the point of exit from the pathway. More severe dilation with increased risk (A2, A3 or P2, P3) requires specialist input.
- **Registration of the patient with a GP is Essential**. To help ensure continuity of care, all women with antenatally detected fetal renal dilatation should be registered with a GP in the area in which they intend to live. Following delivery, the newborn should also be promptly registered with this GP who, in the case of low risk dilatation (A1 or P1) can manage the follow-up of this child, with assistance from the reporting radiologist and the pathway.
- **The LMC is responsible** for requesting the first postnatal ultrasound and ensuring that the GP receives a copy of the report.
- This GP is responsible for ensuring that the follow-up ultrasound result is viewed and acted on according to the pathway. If there is uncertainty then a regional paediatric renal tract or radiology specialist should be contacted for advice.
- **Community management of low risk (A1 or P1) dilation**. Some key features of community management of low risk (A1 or P1) dilation in this pathway are:
  - Low risk dilation (A1) in the second trimester *requires third trimester follow up*, arranged by the LMC
  - Low risk dilation (A1) in the second trimester which normalises in the third trimester *does not require any further follow up*
  - Low risk dilation (A1) in the third trimester *no longer requires a day 7 ultrasound* in areas which previously performed this, instead opting for imaging at 1-3 months
  - Low risk antenatal dilation (A1) which is normal at 1-3 months after birth *does not require any further follow up*
  - Low risk post natal dilation at 1-3 months *requires a follow up scan at 12 months*, requested and reviewed by the GP
  - Low risk postnatal dilation (P1) at 1-3 months which is stable at 12 months after birth *does not require any further follow up*
  - On every occasion, the severity of dilation should be reassessed by the current appearance and the pathway should be followed appropriately

#### Caveats

- Service provision varies region by region. We expect minor modifications may have to be made to accommodate this
- There will be a learning curve for all providers. For example ultrasound reports of dilatation may omit the grade of severity. This will make it difficult to use the new pathway unless clear instructions for follow up are included in the report.
- Some Pathway changes that completely remove a scan recommendation require accurate antenatal grading. For example, the new pathway removes the routine postnatal scan at day 7 for low risk antenatal dilatation (A1), and replaces it with a recommendation to scan at 1-3 months. This change will reduce unnecessary postnatal scans but it requires accurate antenatal grading, to avoid delayed diagnosis of significant conditions such as posterior urethral valves. If the grading of dilatation is unclear from the report then please contact the performing ultrasound service and ask for the grade of severity to be added to the report or ask a paediatric or obstetric radiologist to review the images and provide a grade

Queries and feedback on this new guideline are welcomed

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On behalf of the Auckland contributors to the National Antenatally Detected Asymptomatic Renal Dilation consensus group