- **This checklist is to be used from Day 1, for all babies admitted in the neonatal unit, to guide the daily calculation of IV fluid and feed requirements.**
- The purpose of this management checklist is to ensure an appropriate and acceptable standard of care.
- It is aimed at nurses and junior/inexperienced medical practitioners.
- Individual critical clinical judgment should always be used.

Name:		IP. NO.	

ADMISSION (DAY 1): ✔

Step 1: Select total required daily fluids.		
Preterm < 1000g	100 ml/kg/day	
Preterm > 1000g	80 ml/kg/day	
Term	60 ml/kg/day	
If on phototherapy and receiving IV fluid	Add additional 20ml/kg/day	

Step 2: Calculate actual daily fluids to be administered according to birth weight.		
Multiply Step1 by birth weight.	**Total daily fluid volume:**	**ml/day**

Step 3: Calculate feeds.		
HIV exposure: Do not give breastmilk if mother has **confirmed** treatment failure-See HIV guidelines		
If baby is sick or distressed apply colostrum 3-6hrly to mouth tissues but do not commence NG feeds.		>1000g start breast milk feeds at 20ml/kg/day
>1500g and **well**-start full feeds.		<1000g start breast milk feeds at 10ml/kg/day
1. Multiply feed volume by birth weight	**Total daily feed volume:**	**mls/day**
2. Divide total feed volume by 8	**3hrly feed volume:**	**mls/3hrly**

Step 4: Calculate IV fluids		
1. Subtract Total feeds (Step 3) from total daily volume (Step 2) **Maintenance fluid volume:**		**mls/day**
2. Divide maintenance fluid by 24	**IV Fluid rate:**	**ml/hr**

Step 5: Document		
1. Document in **medical plan** in Daily assessment chart		
2. Document in **fluid balance** in Daily assessment chart		

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DAY 2 ✔

Step 1: Select total required daily fluids. (At least 12 hrs must have passed since birth)		
Preterm < 1000g	120 ml/kg/day	
Preterm > 1000g	100 ml/kg/day	
Term	90 ml/kg/day	
If on phototherapy and receiving IV fluid	Add additional 20ml/kg/day	

Step 2: Calculate actual daily fluids to be administered according to birth weight.		
Multiply Step1 by birth weight.	**Total daily fluid volume:**	**ml/day**

Step 3: Calculate feeds.		
If baby has decreased/no bowel sounds apply colostrum to mouth tissues- don't commence feeds		>1000g start/increase EBM feeds by 20ml/kg/day
>1500g and **well** continue full feeds		<1000g start/increase EBM by 10ml/kg/day
1. Increase previous day's feed volume	**Required daily feed volume:**	**ml/kg/day**
2. Multiply by birth weight	**Total daily feed volume:**	**mls/day**
3. Divide total feed volume by 8	**3hrly feed volume:**	**mls/3hrly**

Step 4: Calculate IV fluids		
1. Subtract Total feeds (Step 3) from total daily volume (Step 2) **Maintenance fluid volume:**		**mls/day**
2. Divide maintenance fluid by 24	**IV Fluid rate:**	**ml/hr**

Step 5: Document		
1. Document on medical plan on Daily assessment chart		
2. Document on fluid balance on Daily assessment chart		

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DAY 3			✓
Step 1: **Select total required daily fluids.** (At least 12 hrs must have passed since birth)			
Preterm < 1000g	140 ml/kg/day		
Preterm > 1000g	120 ml/kg/day		
Term	120 ml/kg/day		
If on phototherapy and receiving IV fluid	Add additional 20ml/kg/day		
Step 2: **Calculate actual daily fluids to be administered according to birth weight.**			
Multiply Step1 by birth weight.	**Total daily fluid volume:**		**ml/day**
Step 3: **Calculate feeds.**			
If baby has decreased/no bowel sounds apply colostrum to mouth tissues- don't commence feeds.		>1000g start/increase EBM feeds by 20ml/kg/day	
>1500g and **well** continue full feeds		<1000g start/increase EBM by 10ml/kg/day	
1. Increase previous day's feed volume	**Required daily feed volume:**		**ml/kg/day**
2. Multiply by birth weight	**Total daily feed volume:**		**mls/day**
3. Divide total feed volume by 8	**3hrly feed volume:**		**mls/3hrly**
Step 4: **Calculate IV fluids**			
1. Subtract Total feeds (Step 3) from total daily volume (Step 2)	**Maintenance fluid volume:**		**mls/day**
2. Divide maintenance fluid by 24	**IV Fluid rate:**		**ml/hr**
Step 5: Document			
1. Document on medical plan on Daily assessment chart			
2. Document on fluid balance on Daily assessment chart			
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DAY 4			✓
Step 1: **Select total required daily fluids.** (At least 12 hrs must have passed since birth)			
Preterm < 1000g	160 ml/kg/day		
Preterm > 1000g	140 ml/kg/day		
Term	150 ml/kg/day		
If on phototherapy and receiving IV fluid	Add additional 20ml/kg/day		
Step 2: **Calculate actual daily fluids to be administered according to birth weight.**			
Multiply Step1 by birth weight.	**Total daily fluid volume:**		**ml/day**
Step 3: **Calculate feeds.**			
Feeds must be commenced or TPN given		>1000g start/increase EBM feeds by 20ml/kg/day	
>1500g and **well** continue full feeds		<1000g start/increase EBM by 10ml/kg/day	
1. Increase previous day's feed volume	**Required daily feed volume:**		**ml/kg/day**
2. Multiply by biggest weight (birth/daily weight)	**Total daily feed volume:**		**mls/day**
3. Divide total feed volume by 8	**3hrly feed volume:**		**mls/3hrly**
Step 4: **Calculate IV fluids**			
1. Subtract Total feeds (Step 3) from total daily volume (Step 2)	**Maintenance fluid volume:**		**mls/day**
2. Divide maintenance fluid by 24	**IV Fluid rate:**		**ml/hr**
Step 5: Document			
1. Document on medical plan on Daily assessment chart			
2. Document on fluid balance on Daily assessment chart			
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DAY 5			✓
Step 1:	**Select total required daily fluids.** (At least 12 hrs must have passed since birth)		
Preterm < 1000g	160 -180ml/kg/day		
Preterm > 1000g	160 ml/kg/day		
Term	150 ml/kg/day		
If on phototherapy and receiving IV fluid	Add additional 20ml/kg/day		
Step 2:	**Calculate actual daily fluids to be administered according to birth weight.**		
Multiply Step1 by birth weight.		**Total daily fluid volume:**	**ml/day**
Step 3:	**Calculate feeds.**		
Increase feeds daily as tolerated		>1000g start/increase EBM feeds by 20ml/kg/day	
>1500g and **well** continue full feeds		<1000g start/increase EBM by 10ml/kg/day	
1. Increase previous day's feed volume		**Required daily feed volume:**	**ml/kg/day**
2. Multiply by biggest weight (birth/daily weight)		**Total daily feed volume:**	**mls/day**
3. Divide total feed volume by 8		**3hrly feed volume:**	**mls/3hrly**
Step 4:	**Calculate IV fluids**		
1. Subtract Total feeds (Step 3) from total daily volume (Step 2)		**Maintenance fluid volume:**	**mls/day**
2. Divide maintenance fluid by 24		**IV Fluid rate:**	**ml/hr**
Step 5: Document			
1. Document on medical plan on Daily assessment chart			
2. Document on fluid balance on Daily assessment chart			
Sign:		**Print:**	
Date:		**Time:**	

DAY 6			✓
Step 1:	**Select total required daily fluids.** (At least 12 hrs must have passed since birth)		
Preterm < 1000g	160 -180ml/kg/day		
Preterm > 1000g	160 -180ml/kg/day		
Term	150 ml/kg/day		
If on phototherapy and receiving IV fluid	Add additional 20ml/kg/day		
Step 2:	**Calculate actual daily fluids to be administered according to birth weight.**		
Multiply Step1 by birth weight.		**Total daily fluid volume:**	**ml/day**
Step 3:	**Calculate feeds.**		
Increase feeds daily as tolerated		>1000g start/increase EBM feeds by 20ml/kg/day	
>1500g and **well** continue full feeds		<1000g start/increase EBM by 10ml/kg/day	
1. Increase previous day's feed volume		**Required daily feed volume:**	**ml/kg/day**
2. Multiply by biggest weight (birth/daily weight)		**Total daily feed volume:**	**mls/day**
3. Divide total feed volume by 8		**3hrly feed volume:**	**mls/3hrly**
Step 4:	**Calculate IV fluids**		
1. Subtract Total feeds (Step 3) from total daily volume (Step 2)		**Maintenance fluid volume:**	**mls/day**
2. Divide maintenance fluid by 24		**IV Fluid rate:**	**ml/hr**
Step 5: Document			
1. Document on medical plan on Daily assessment chart			
2. Document on fluid balance on Daily assessment chart			
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Name:		IP. NO.	

DAY 7			✓
Step 1: Select total required daily fluids. (At least 12 hrs must have passed since birth)			
Preterm < 1000g	160 -180ml/kg/day		
Preterm > 1000g	160 -180ml/kg/day		
Term	150 ml/kg/day		
If on phototherapy and receiving IV fluid	Add additional 20ml/kg/day		
Step 2: Calculate actual daily fluids to be administered according to birth weight.			
Multiply Step1 by birth weight.	**Total daily fluid volume:**		**ml/day**
Step 3: Calculate feeds.			
Increase feeds daily as tolerated		>1000g start/increase EBM feeds by 20ml/kg/day	
>1500g and **well** continue full feeds		<1000g start/increase EBM by 10ml/kg/day	
1. Increase previous day's feed volume	**Required daily feed volume:**		**ml/kg/day**
2. Multiply by biggest weight (birth/daily weight)	**Total daily feed volume:**		**mls/day**
3. Divide total feed volume by 8	**3hrly feed volume:**		**mls/3hrly**
Step 4: Calculate IV fluids			
1. Subtract Total feeds (Step 3) from total daily volume (Step 2)	**Maintenance fluid volume:**		**mls/day**
2. Divide maintenance fluid by 24	**IV Fluid rate:**		**ml/hr**
Step 5: Document			
1. Document on medical plan on Daily assessment chart			
2. Document on fluid balance on Daily assessment chart			
Sign:		**Print:**	
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Ongoing			✓
Step 1: Select total required daily fluids.			
Preterm < 1000g	160-180 ml/kg/day		
Preterm > 1000g	160-180 ml/kg/day		
Term	150 ml/kg/day		
If on phototherapy and receiving IV fluid	Add additional 20ml/kg/day		
NB. Do not exceed 180ml/kg/day without dietician and consultant input			
Step 2: Calculate actual daily fluids to be administered according to weight.			
1. Multiply Step1 by biggest weight (birth/daily weight)			
2. If baby fails to gain weight or loses weight for 3 days consult dietician.			
Step 3: Calculate feeds.			
1. Increase all babies' (including <1000g) feeds daily by 20ml/kg/day but do not exceed 180ml/kg/day			
2. Add fortification (FM 85) after consultation with MDT, if baby not gaining at least 15g/kg/day for 1 week with adequate fluid volumes, at least 100ml/kg feeds, increased frequency of feeds & no medical problems.			
Step 5: Calculate IV fluids			
1. Aim to have baby on full feeds by Day 8-10. No IV fluids.			
Sign:		**Print:**	
Date:		**Time:**	

Authorized By:		**Dr N. McKerrow-KZN Provincial Paediatrician**	
Date:	18 January 2018	**Review Date:**	18 January 2021
Abbreviations: IP= Inpatient; g= grams; ml=milliliters; kg=kilogram; hr/hrly=hour/ly; IV= Intravenous			