 <p style="text-align: center;"><b>CREDIT VALLEY</b> THE CREDIT VALLEY HOSPITAL</p>	<p>CLINICAL PRACTICE GUIDELINE</p>	<p>PROFESSIONAL PRACTICE</p>
<p><b>TITLE: Neonatal Hypoglycemia</b></p>		
<p><b>DATE OF ISSUE:</b> 1997, 01</p>	<p><b>PAGE</b> 1 <b>OF</b> 4 (Appendix)</p>	<p><b>NUMBER:</b> CPG 14-6</p>
<p><b>SUPERCEDES:</b> New</p>	<p><b>ISSUED BY:</b> _____ <b>TITLE:</b> Chief of Medical Staff</p>	
	<p><b>ISSUED BY:</b> _____ <b>TITLE:</b> President</p>	

**Purpose:**

To provide a guideline to assist Paediatricians in the monitoring and management of an infant with hypoglycemia.

Hypoglycemia is defined as a serum glucose level less than 2.5 mmol/L in the term infant and less than 2.2 mmol/L in the pre-term infant. (Lucas, et al, 1988 and Volpe, 1994)

Individual circumstances may dictate the most appropriate treatment.

**Responsibilities:**

All neonates with hypoglycemia will have their care managed by a Paediatrician in the Special Care Nursery.

The correction and treatment of the hypoglycemia will be according to the Neonatal Treatment/Diagnostic Algorithm for Hypoglycemia.

Glucose infusion rates will be ordered according to the Table on Infusion Rates for Glucose Administration.

Copies of the Neonatal Treatment/Diagnostic Algorithm for Hypoglycemia and Infusion Rates for Glucose Administration will be kept in the Special Care Nursery.

**Monitoring:**

The response to the treatment of neonates with hypoglycemia will be monitored in accordance with the Nursing Policy and Procedure for Hypoglycemia Screening-Neonate and the Neonatal Treatment/Diagnostic Algorithm for Hypoglycemia.

The aim of the management is to keep the serum glucose level at 3.0-4.0 mmol/L.

**Evaluation:**

A Clinical Focus Study will be initiated in February 1997 to evaluate the compliance to the Neonatal Algorithm for Hypoglycemia.

Treatment outcomes will be evaluated by comparing the serum glucose levels to the glucose infusion rates.

**References:**

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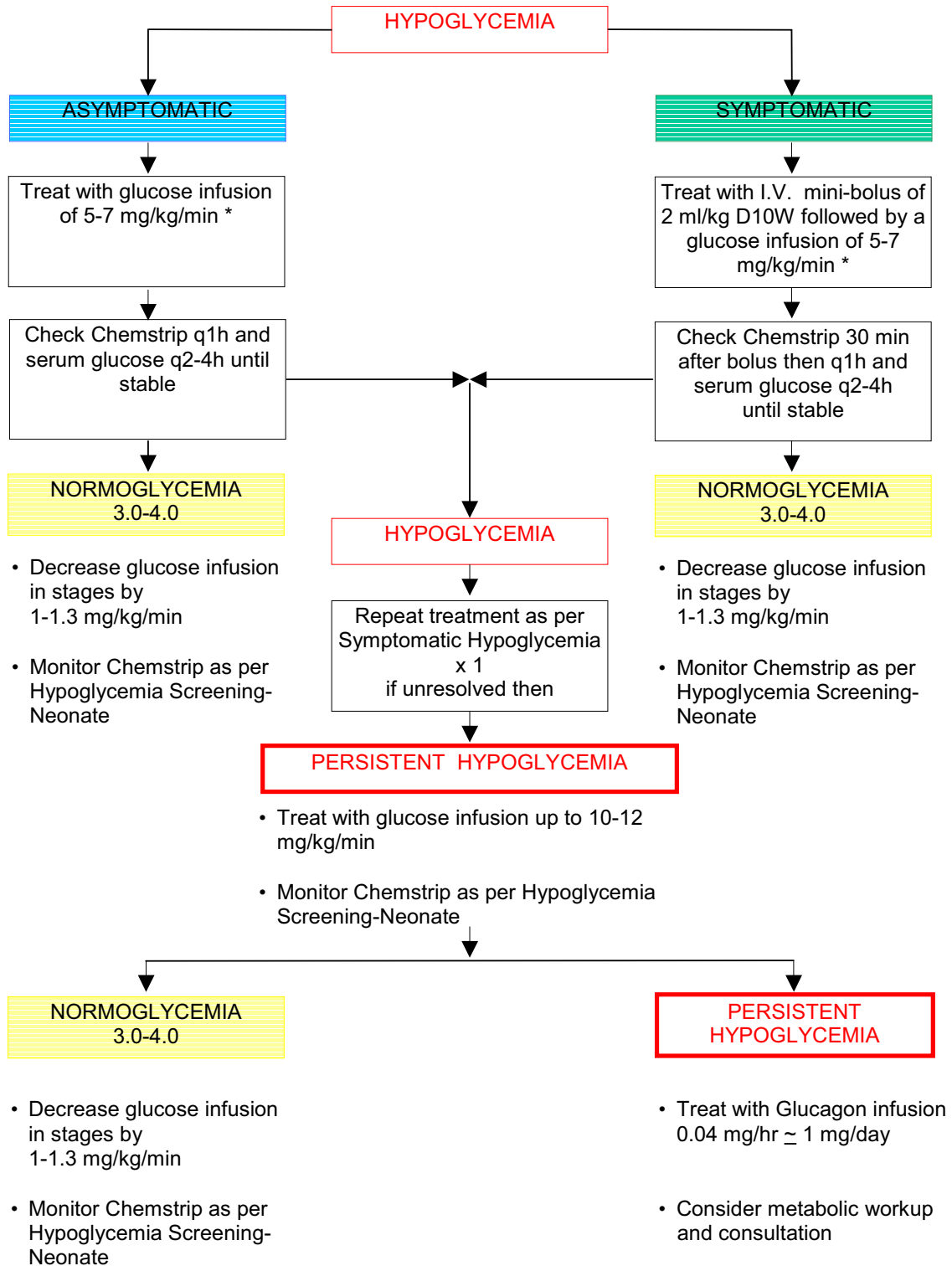
**Approval:**

Department of Paediatrics: December, 1996  
Special Care Nursery Committee: December, 1996  
Clinical Quality Care Committee: December, 1996  
Professional Practice Committee: December, 1996  
Medical Advisory Committee: January, 1997

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## Neonatal Treatment/ Diagnostic Algorithm for Hypoglycemia

Hypoglycemia is defined as: Serum glucose level < 2.5mmol/L - term  
< 2.2mmol/L - pre-term infant



\* Infusion Rates for Glucose Administration on next page

### Infusion Rates for Glucose Administration

Fluid Requirements (cc/kg/day)	Glucose Concentration (mg/kg/min)			
	5%	7.5%	10%	12.5%
50	1.74	2.60	3.47	4.34
60	2.08	3.13	4.17	5.21
70	2.43	3.64	4.86	6.08
80	2.78	4.17	5.56	6.94
90	3.13	4.69	6.25	7.81
100	3.47	5.21	6.94	8.68
110	3.82	5.73	7.64	9.55
120	4.17	6.25	8.33	10.42
130	4.51	6.78	9.03	11.28
140	4.86	7.39	9.72	12.15
150	5.21	7.80	10.42	13.02