Early Years Policy – Diabetes

Attachment 1 - Strategies for the management of diabetes in children at the service

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| Strategy | Action |
| Monitoring of glucose levels | * Checking of glucose levels is performed using either a fingerpick blood glucose monitor, continuous glucose monitoring or a flash glucose monitoring. The child’s diabetes action and management plan should state the times that glucose levels should be checked, the method of relaying information to families about glucose levels and any intervention required, if the glucose level is found to be below or above the child’s target glucose range. A communication book can be used to provide information about the child’s glucose levels between families and the service at the end of each session. * Children will need assistance with checking their glucose levels and if required to do a fingerpick blood glucose check. * Families should be asked to teach service staff about glucose checking procedures. * Families are responsible for supplying a fingerpick blood glucose monitor and in-date test strips if required for their child while at the service. |
| Managing hypoglycaemia (hypos) | * Hypos should be recognised and treated promptly, according to the instructions provided in the child’s diabetes action and management plan. * Families are responsible for providing the service with oral hypoglycaemia treatment (hypo food) for their child in an appropriately labelled container. * This hypo container must be securely stored and readily accessible to all staff. |
| Administering insulin | * Administration of insulin during service hours may be required; this will be specified in the child’s diabetes action and management plan. * As a guide, insulin for service-aged children may be administered via:   + twice daily injections: before breakfast and dinner at home   + multiple daily injections: either before meals or other specified times, as indicated on the child’s diabetes management plan   + by a small insulin pump worn by the child. * If insulin is required to be administered by the staff, then it is recommended that they receive skills-based training from the child’s diabetes treating team. |
| Managing ketones | * Fingerpick blood ketone checking may be required when the child’s blood glucose level is greater than or equals 15.0 mmol/L. * Refer to the child’s diabetes action and management plan. |
| Off-site excursions and activities | * With good planning, children should be able to participate fully in all service activities, including attending excursions. * The child’s diabetes action and management plan should be reviewed prior to an excursion, with additional advice provided by the child’s families, as required. |
| Infection control | * Infection control procedures must be developed and followed. * Infection control measures include being informed about ways to prevent infection and cross-infection. * When checking fingerpick blood glucose levels, staff must:   + ensure the child’s hands are washed and dried prior to check   + wear disposable gloves   + use the child's own lancet device, and ensure this is stored safely so it cannot be used by other children; if more than one child living with type 1 diabetes is at the service, never share lancet devices; staff should not remove the lancet from the device   + safely dispose of all medical waste. * If insulin injections are administered at the service, staff should be instructed on the safe removal of the pen needle (without manually handling it) by the child’s diabetes treating team, to avoid a possible needlestick injury. * A sharps’ container is to be supplied by families if insulin injections are administered at the service, for the disposal of used pen needles. |
| Timing meals | * Most meal requirements will fit into regular service routines. * Children living with type 1 diabetes require extra supervision at meal and snack times, to ensure that they eat all their carbohydrates. If an activity is running overtime, children with diabetes cannot have delayed mealtimes. Missed or delayed carbohydrate is likely to induce hypoglycaemia (hypo). |
| Physical activity | * Some children living with diabetes may require carbohydrate food before planned extra physical activity. Their diabetes management plan will provide specific guidance. * Refer to the child’s diabetes action and management plan for specific requirements in relation to physical activity. |
| Participation in special events | * The service should seek families' advice regarding foods for special events, such as parties/celebrations. |
| Communicating with parents | * Services should communicate directly and regularly with families to ensure that their child’s individual diabetes action and management plan is current. * Services should establish a mutually agreeable home-to-service means of communication to relay health information and any health changes or concerns. * Communicate with family via Enrol Now email if required. |

| Term | Definition |
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| Blood glucose meter | A compact device used to check a small blood drop sample to determine the blood glucose level. |
| Continuous glucose monitoring (CGM) | A means of measuring glucose levels continuously, in contrast to a blood glucose meter that measures a single point in time. A CGM system sensor is inserted into the skin separately to the insulin pump, and measures the level of glucose in the interstitial fluid (fluid in the tissue).  The sensor continuously sends real-time glucose readings wirelessly to a receiver (the insulin pump, a smart phone or dedicated device) so the user can view the information. The CGM receiver and/or compatible smart device can usually be set to send custom alerts to the user when certain glucose thresholds are reached or if levels are changing rapidly, reducing or eliminating the need for blood glucose finger prick tests and enabling early intervention to prevent the person becoming ‘hypo’ or ‘hyper’. Children in Australia with Type 1 Diabetes have free access to CGM technology. |
| Flash glucose monitoring (FGM) | Uses a sensor attached to the skin, much like a CGM, to measure glucose levels without finger pricks. In contrast to CGM, the FGM sensor will not continuously send readings to a device. The reader (certain blood glucose monitors and smart phones) is scanned over the sensor to obtain the data. |
| Hyperglycaemia (high blood glucose) | Occurs when the blood glucose level rises above 15 mmol/L. Hyperglycaemia symptoms can include increased thirst, tiredness, irritability and urinating more frequently. High blood glucose levels can also affect thinking, concentration, memory, problem-solving and reasoning. Common causes include but are not limited to:   * taking insufficient insulin/or missed insulin dose * eating more carbohydrates than planned * common illnesses or infections such as a cold * stress or excitement |
| Hypoglycaemia or hypo (low blood glucose) | Having a blood glucose level that is lower than normal i.e. below 4 mmol/L, even if there are no symptoms. Neurological symptoms can occur at blood glucose levels below 4 mmol/L and can include sweating, tremors, headache, pallor, poor co-ordination and mood changes. Hypoglycaemia can also impair concentration, behaviour and attention, and symptoms can include a vague manner and slurred speech.  Hypoglycaemia is often referred to as a ‘hypo’. Common causes include but are not limited to:   * taking too much insulin * delaying a meal * consuming an insufficient quantity of carbohydrates at a meal * undertaking unplanned or unusual exercise * illness   It is important to treat hypoglycaemia promptly and appropriately to prevent the blood glucose level from falling even lower, as very low levels can lead to loss of consciousness and possibly convulsions.  The child’s diabetes action and management plan will provide specific guidance for services in preventing and treating a hypo. |
| Insulin | Medication prescribed and administered by injection or continuously by a pump device to lower the blood glucose level. In the body, insulin allows glucose from food (carbohydrates) to be used as energy, and is essential for life. |
| Insulin pump | A a small battery-operated electronic device that holds a reservoir of insulin. It is about the size of a mobile phone and is worn 24 hours a day. The pump is programmed to deliver insulin into the body through thin plastic tubing known as the infusion set or giving set. The pump is worn outside the body, in a pouch or on your belt. The infusion set has a fine needle or flexible cannula that is inserted just below the skin where it stays in place. |
| Ketoacidosis | A serious condition associated with illness or very high blood glucose levels in type 1 diabetes. It develops gradually over hours or days. Ketoacidosis is related to hyperglycaemia and is a sign of insufficient insulin. High levels of ketones can make children very sick. Extra insulin is required (given to children by families) when ketone levels are >0.6 mmol/L if insulin is delivered via a pump, or >1.0 mmol/L if on injected insulin.  Symptoms of ketoacidosis may include high blood glucose levels and moderate to heavy ketones in the urine with rapid breathing, flushed cheeks, abdominal pain, sweet acetone (similar to paint thinner or nail polish remover) smell on the breath, vomiting and/or dehydration.  This is a serious medical emergency and can be life threatening if not treated properly. If the symptoms are present, contact a doctor or call an ambulance immediately. |
| Type 1 diabetes | An autoimmune condition that occurs when the immune system damages the insulin producing cells in the pancreas. Type 1 diabetes is treated with insulin replacement via injections or a continuous infusion of insulin via a pump. Type 1 diabetes is not linked to modifiable lifestyle factors. Currently there is no cure. Type 1 diabetes can be life threatening. |
| Type 2 diabetes | Type 2 diabetes in children is a chronic disease that affects the way the child's body processes sugar (glucose) for fuel. Type 2 diabetes occurs more commonly in adults. |