TYPE 2 MANAGEMENT ALGORITHM

Suspected or confirmed type 2 diabetes in child or adolescent
May be awaiting results of lab test to confirm type 2

RPG <250
No symptoms
No Ketosis

RPG 250-300
No or mild symptoms
No Ketosis

- Initiate Education (a)
- Refer for Medical Nutrition Therapy (b)
- Reassess within 2-4 weeks

Able to maintain target BG (c) at least 75% of time?

- Initiate Education (a)
- Refer for Medical Nutrition Therapy (b)
- Initiate metformin therapy
  - Start with 500 mg PO twice daily for 4-7 days
  - Increase dose to a maximum of 1,000 mg twice daily as tolerated
  - Reassess within 2-4 weeks

Able to maintain target BG (c) at least 75% of time?

- Check compliance with oral medication and reinforce lifestyle self-management as necessary
- Consider adding insulin to metformin (d)
- Consult with a pediatric endocrinologist before trying other oral antihyperglycemic agents**
- Reassess within 2-4 weeks

Able to maintain target BG (c) at least 75% of time?

- When BG is under control:
  - Monitor A1C at least quarterly
  - Follow other routine screening guidelines on pages iii-iv
  - Provide continuing education per guidelines on page 9

A1C <7

(b) Refer for MEDICAL NUTRITION THERAPY (MNT)

Medical Nutrition Therapy for type 2 should be done by a dietitian with experience with pediatric patients. Dietitian should provide meal plan to support weight loss (if necessary) as well as control glucose, lipids, and blood pressure levels.

(c) Target BG based on age (type 2) on Oral Hypoglycemics (OHA)

<table>
<thead>
<tr>
<th>Age</th>
<th>BG before meals</th>
<th>BG bedtime/overnight</th>
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<tbody>
<tr>
<td>6-12 yr</td>
<td>&lt;7.0%</td>
<td>90-180 mg/dL</td>
</tr>
<tr>
<td>13-18 yr</td>
<td>&lt;7.0%</td>
<td>90-130 mg/dL</td>
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</tbody>
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*This A1C (<7.0%) was chosen specifically for children on OHA. In the experience of the committee, most children will quickly require insulin and consequently a lower A1c was selected in order to facilitate management. A1C should be as low as possible without risking significant hypoglycemia.

(d) Guidelines for adding insulin to metformin

Initially, the addition of once daily long-acting insulin to metformin may provide control. A starting dose of 5-10 units SC at bedtime can be used (0.1-0.2 u/kg/day). The dose should be titrated up every 3-4 days based upon that fasting blood glucose is in target and the rest of the glucose values during the day are high, then rapid-acting insulin (pre-meal) should be added next.

*Only metformin and insulin have been reliably studied and used in children and adolescents. Although there are anecdotal reports of successful use of other antidiabetics agents in pediatric patients, if patients fail to respond to these outlined therapy guidelines, a pediatric endocrinologist should be consulted prior to initiating therapy with other agents. In rural areas, consultation with any endocrinologist may be a more accessible option.