Figure 2 - Algorithm for Managing Glucose with Once Daily Steroid Therapy

No known diabetes

- Check random glucose before starting on steroids to identify individuals at risk
- Random capillary blood glucose over 8 mmol/l needs further checking with venous blood
- Random venous glucose over 7.8 mmol/l means at risk of developing diabetes with steroid therapy
- Random venous glucose over 11 mmol/l needs a second check to confirm pre-existing unknown diabetes

Known Diabetes
Reassess glucose control and current therapy

Diet controlled or Metformin alone or Metformin + Gliptin

- Test before evening mealtime
  - If develops repeated high readings (urine glucose >2+ or blood glucose >15 mmol/l) add Gliclazide 40mg with breakfast
  - Increase morning dose by 40mg daily increments
  - Aim blood glucose 6-15 mmol/l or <1+ trace glycosuria before evening meal
  - If no hypoglycaemia symptoms, day or night, taking 240mg and still above target
    - Consider adding evening meal dose of Gliclazide or move to morning insulin

Sulphonylurea treated (e.g. Gliclazide)

If no hypoglycaemia symptoms, day or night and taking less than 320mg/day
  - Adjust balance of twice daily doses of Gliclazide by giving up to a max 240mg in morning dose plus 80mg pm
  - Aim blood glucose 6-15 mmol/l or <1+ glycosuria before evening meal

Insulin treated

Twice daily insulin
  - Morning dose will need to increase according to glucose reading before evening meal
  - Aim blood glucose 6-15 mmol/l before evening meal unless patient has "hypo" before meals despite mid-meal snacks

- Basal bolus insulin
  - Breakfast & lunchtime rapid acting insulin may need to increase to avoid high readings before lunch or evening meal
  - Aim blood glucose 6-15 mmol/l before lunch and evening meal unless patient has "hypo" before meals despite mid-meal snacks or has long gaps between meals

If glucose above 15 mmol/l before evening meal
  - Increase dose
  - Review daily until stable increasing dose as necessary

If glucose >15 mmol/l before evening meal
  - Consider increasing dose depending on risk of hypoglycaemia
  - Review daily until stable increasing dose as necessary

Assuming no hypoglycaemia, pre-meal time glucose is above 10 mmol/l an increase in dose is needed:
  - Increase dose by 10-20% if dose below 20 units
  - Increase dose by 10-20% if dose 20-50 units
  - Increase dose by 10-20% if dose 50-100 units
  - Review daily until stable increasing dose as necessary

If steroids are reduced or discontinued:

⚠️ Review any changes made and consider reverting to previous therapy or doses
⚠️ If unsure at any stage about next steps or want specific advice on how to meet with patients needs or expectations please contact the Diabetes Specialist Team
⚠️ If steroids are reduced and the individual is on a sulphonylurea agent or insulin there is a significant risk of hypoglycaemia. Please reduce the dose of these drugs in tandem with the steroid dose reduction