

Sick day plan for type 2 diabetes – template

Using this template

This template is designed to help general practitioners and other healthcare professionals create a practical sickday management plan with their patients with type 2 diabetes.

Instructions to prescribers are presented in *yellow highlights* throughout. These should be removed before using the template with patients.

This template should be individualised to create a plan appropriate for each patient's circumstances. See highlighted areas for where to insert prescribing information. Any advice incorporated into the plan needs input from the patient and their health professional team. You can also use National Diabetes Services Scheme (NDSS) and Diabetes Australia patient handouts to support this plan.

For further information about sick day management, please refer to the RACGP's <u>General practice management</u> of type 2 diabetes.

Notes

- 1. Consider advising all patients using sodium glucose co-transporter 2 (SGLT2) inhibitors or insulin to monitor blood ketone levels during intercurrent illness.
- DPP-4 inhibitors are usually well tolerated during intercurrent illness. Note that sulfonylureas may aggravate
 or precipitate hypoglycaemia in people with intercurrent illness. Use of corticosteroids may precipitate
 hyperglycaemic emergencies even in those people with diabetes managed with diet alone.
- 3. Adjusting doses of the following basal insulins may not result in similar changes in glucose management during intercurrent illness, due to the prolonged half-life: insulin glargine U300 (Toujeo®) and degludec containing co-formulated insulin (Ryzodeg®). If prescribing the above or multiple daily premixed insulin, consider discussing dose-adjustments for intercurrent illness with a specialist diabetes team.

References and resources

Ambler G, Cameron F, Gillibank J. Caring for diabetes in children and adolescents, 3rd edn. Children's Diabetes Services, 2010.

Australian Diabetes Educators Association. <u>Clinical guiding principles for sick day management of adults with type 1 and type 2</u> <u>diabetes. Technical document</u>. Canberra: ADEA, 2016.

Bornstein S, Rubino F, Khunti K et al. Practical recommendations for the management of diabetes in patients with COVID-19. Lancet 2020; doi.org/10.1016/S2213-8587(20)30152-2

Craig M, Twigg S, Donaghue K et al. National evidence-based clinical care guidelines for type 1 diabetes in children, adolescents and adults. Canberra: Australian Government Department of Health and Ageing, 2011.

Down S. How to advise on sick day rules. Diabet Primary Care 2020; 20:15–16.

Hamblin P, Wong R, Bach L. Sodium-glucose cotransporter type 2 inhibitors: managing the small but critical risk of diabetic ketoacidosis. Med J Aust 2020; doi: 10.5694/mja2.50525

Diabetes Australia: Diabetes and Driving.

Diabetes Australia: Managing Hypoglycaemia (for patients).

International Hypoglycaemia Study Group: Tools for healthcare professionals.

The Royal Australian College of General Practitioners and the Australian Diabetes Society. <u>Emergency management of hyperglycaemia in primary care</u>. 2018.

Disclaimer

The information set out in this publication is current at the date of first publication and is intended for use as a guide of a general nature only and may or may not be relevant to particular patients or circumstances. Nor is this publication exhaustive of the subject matter. It is no substitute for individual inquiry. Compliance with any recommendations does not guarantee discharge of the duty of care owed to patients. The RACGP and its employees and agents have no liability (including for negligence) to any users of the information contained in this publication.

Sick day plan for type 2 diabetes

Patient name:

Health practitioner name:

Contact number:

After-hours contact:

Diabetes service (if applicable):

What to consider	What to do
Be prepared for sick days	Ensure you know how to use your glucose monitor and have enough strips to monitor blood glucose for about a week – this might need to be as much as 12 tests per day. Check the expiry dates of the strips.
	Check that you have enough medications, including insulin.
When to start your plan	Start to follow this plan:
	 if you are feeling unwell – even if your glucose levels are normal; or
	 if your glucose levels are above 15 mmol/L two times in a row; or
	if your glucose levels fall below 4 mmol/L
Blood glucose monitoring	If you are not already monitoring your blood glucose levels, start monitoring them when you start following this plan
What to do if your support person is not available	If you can manage ok, then follow the plan.
	If you feel too unwell to manage your diabetes or need any assistance, please call your doctor or diabetes team
Low blood glucose levels (hypoglycaemia)	If your blood glucose is below 4 mmol/L:
	Take 15 grams of glucose (eg 5–6 large glucose jelly beans)
	 After 15 minutes, retest your blood glucose. If it is still below 4 mmol/L, take anothe 15 grams of glucose
	After another 15 minutes, retest your blood glucose.
	• If it is still below 4 mmol/L, call your GP or dial 000.
	 If your blood glucose levels have increased to above 4 mmol/L, eat some additional slow-acting carbohydrate, such as a slice of bread, a dry biscuit or a glass of milk. This may be especially needed if you can't tolerate your usual food, or can't have a normal meal within 20 minutes.
	If your blood glucose levels stay above 4 mmol/L, keep testing them every 2–4 hours for as long as you are unwell. Make an appointment with your GP or diabetes team to discuss the hypoglycaemia and decide whether you need any adjustments to your diabetes management
	Note: <u>Do not drive</u> if your blood glucose levels are below 5 mmol/L
High blood	If your blood glucose levels are above 15 mmol/L, start writing them down so you can share them with your doctor
glucose levels (hyperglycaemia)	If you are taking insulin, follow the instructions below for 'If you are taking insulin'
(, por 91 , ouerina)	Please call your doctor or call 000 if you experience any of the following:
	• your blood glucose levels do not go down to less than 15 mmol/L within 24 hours
	you feel abdominal pain
	you feel drowsy or confused
	 you have difficulty breathing

What to consider	What to do
Blood ketone monitoring	Start monitoring your blood ketone levels if you are instructed to by your health team, or if:
	 your glucose rises above 15 mmol/L and stays there for 4 hours
	 you are taking [Prescriber insert as appropriate name of SGLT2 inhibitor or insulin – see note 1 above], or
	 you have abdominal pain, feel drowsy or confused, or have difficulty breathing
	If your blood ketone levels are above 1.5, notify your doctor or diabetes team
If you are taking diabetes tablets or non-injectable medicines	DO NOT STOP TAKING ANY MEDICATION unless advised as below
	If you have diarrhoea or vomiting, or cannot tolerate fluids, your GP might advise you to STOP taking: [<i>Prescriber insert as appropriate: metformin, and/or GLP-1 RA , SGLT-2</i> inhibitor or sulfonylurea – see note 2]
	If you can keep food and drink down, you may not need to stop taking your medication
	If you are taking [<i>Prescriber insert as appropriate: SGLT-2 inhibitor – see note 2</i>], start monitoring your blood ketone levels, as instructed by your health team (see 'Blood ketone monitoring', above)
If you are taking insulin	DO NOT STOP TAKING INSULIN unless advised
	If you are unwell, you might need to change your insulin dose. Changes to insulin require careful advice from your GP or health team. Make sure you understand the steps you need to take, and talk to your GP or diabetes team if you aren't sure.
	Monitor your blood glucose levels at least every 2 hours while you are unwell, and refer to 'Low blood glucose' and 'High blood glucose', above.
	If your blood glucose levels fall below 4 mmol/L , follow the instructions given under 'Low blood glucose (hypoglycaemia)'.
	If your glucose levels rise above 15 mmol/L and you are taking [<i>Prescriber insert as appropriate: basal insulin</i> – see note 3], do the following:
	 temporarily increase your dose by 10%. For example, if you normally take 40 units, increase to 44 units once a day.
	 If your blood glucose levels go back to normal, start taking your usual dose again
	 If you are also taking tablets, see 'If you are taking diabetes tablets or non-injectable medicines on non-insulin diabetes medicines', above.
	If your glucose is still above 15 mmol/L after 4 hours, do the following:
	 Start blood ketone monitoring (see above). If your blood ketone levels are above 1.5 notify your doctor or diabetes team.
	 You may also need to take extra, rapid-acting insulin, called [Prescriber insert name]:
	 Start with a single injection of [Prescriber insert DOSE: usual dose is 2–4 units only – see note 3]
	2. Keep monitoring your blood glucose every 2 hours
	 After 4 hours – if your blood glucose is still above 15 mmol/L, take another extra dose, following steps 1 and 2 above.
	 After another 4 hours – if there is still no effect on lowering glucose, call your doctor or dial 000
Food and fluids	Make sure you stay hydrated while you're unwell, by drinking 250 mls of fluid every hour
Food and fluids	 If your blood glucose is above 15 mmol/L, you should drink water or drinks that don' contain carbohydrate
	 if your blood glucose less than 15 mmol/L, you can drink any fluids, including those that contain sugar
	Try to keep eating some carbohydrate. If you have nausea or vomiting, try soup (not broths) and light or softer foods

What to consider	What to do
Recovery	Once you start to recover, if your blood glucose is BELOW 15 mmol/L and consistently ABOVE 4 mmol/L, and you are eating and drinking well, you may start taking your medications again if you have stopped them
	Call your GP, credentialled diabetes educator and/or nurse practitioner to schedule a review to discuss your illness and plan
Seeking help	 Call your GP if: you're too unwell to monitor your glucose, or can't keep fluids down your blood glucose levels stay above 15 mmol/L for more than 24 hours your blood glucose levels stay above 15 mmol/L despite two extra rapid-acting insulin doses you can't keep your blood glucose levels above 4 mmol/L you blood ketone levels are >1.5mmol/L you feel drowsy, confused, have difficulty breathing, or have severe abdominal pain you have persistent vomiting, especially if you vomit a lot for more than 2–4 hours
When to go to the emergency department	If you can't contact your doctor, or you feel frightened or unsure, go to an emergency department or call 000