

Infusions – Ordering the Diabetic Ketoacidosis (DKA) Orderset

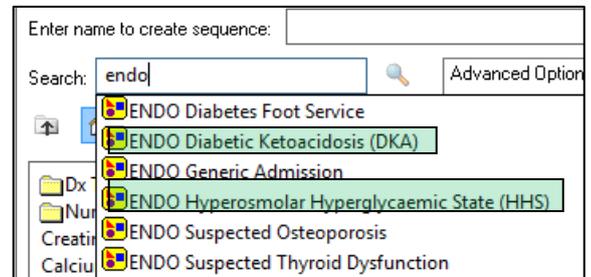


Digital Health
CONNECTING BEST CARE

Digital Health
Quick Reference Guide

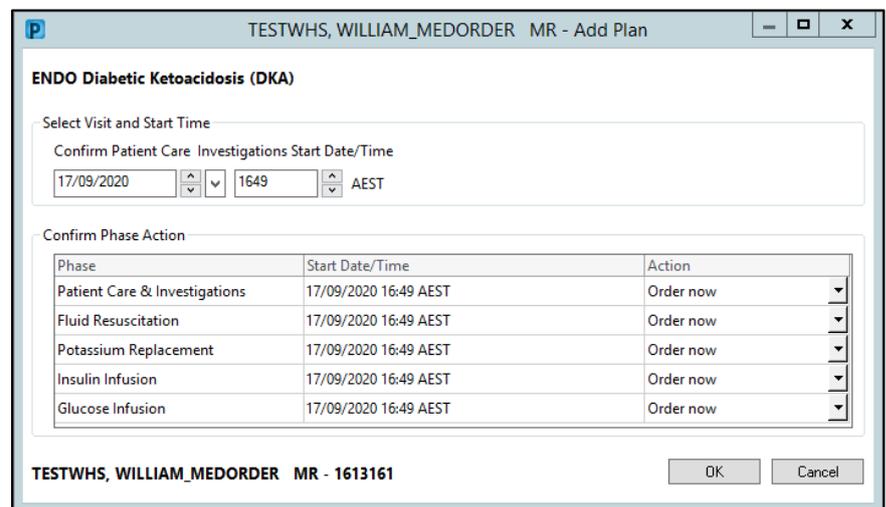
Ordering the ENDO Diabetic Ketoacidosis (DKA) orderset

1. Go to **Orders and Referrals** and click **+Add**
2. Search for "**ENDO**" and note ordersets for **DKA** and **HHS**.
3. Select the appropriate orderset.

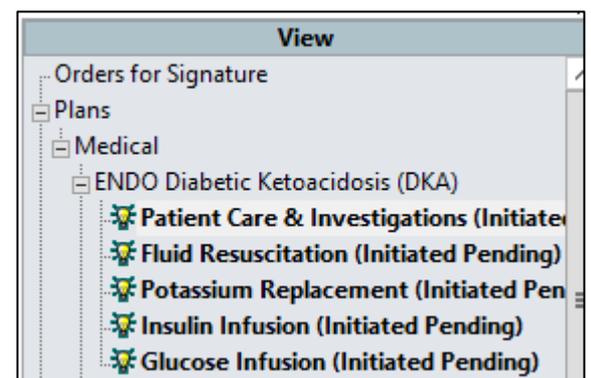


4. A window will display to show this is a multi-phase orderset. Click **OK**

Note: all phases within this orderset have the default action of 'Order Now'



5. All phases appear under **View > Medical**. Click on each phase to view its contents.



6. Patient Care & Investigations

Select all required orders.

ENDO Diabetic Ketoacidosis (DKA), Patient Care & Investigations (Initiated Pending)

DKA - Patient Care & Investigations

<<< Refer to DKA Management in Adults procedure

PATIENT CARE

Diet

Vital Signs Adult

Fluid Balance Chart

Electrocardiogram Bedside (ECG Bedside)

Blood Ketones -Bedside

Blood Glucose Monitoring Bedside

PATHOLOGY

Blood Gas Venous (VBG)

Blood Gas Arterial (ABG)

Glucose Level Blood Fasting (FBG)

The below orders are for repeat VBGs in 4, 8, 12 and 16 hours:

Blood Gas Venous (VBG)

Blood Gas Venous (VBG)

Blood Gas Venous (VBG)

Blood Gas Venous (VBG)

***Note*:** VBG orders have been pre-set to be taken “Now”, then 4, 8, 12 and 16 hours later. These can all be signed off at the same time.

7. Fluid Resuscitation

Select all required orders.

***Note*:** Three Sodium Chloride 0.9% orders have been pre-defined to run as follows:

Sodium Chloride 0.9% intravenous solution (sodium chloride 0.9% infusion (BAG BY BAG))	1,000 mL, IV Infusion, Rate: 999 mL/hr, 1 bag(s) BOLUS
Sodium Chloride 0.9% intravenous solution (sodium chloride 0.9% infusion (BAG BY BAG))	1,000 mL, IV Infusion, 1 bag(s) Second bag
Sodium Chloride 0.9% intravenous solution (sodium chloride 0.9% infusion (BAG BY BAG))	1,000 mL, IV Infusion, 1 bag(s) Third bag

- First bag as a bolus
- Second bag over 1 hour
- Third bag over 2 hours

These can be modified if required prior to signing.

8. Potassium Replacement

Select the KCl infusion order under the appropriate heading, based on what the patient’s serum potassium level is.

- ***All infusions containing potassium will appear in red to indicate high risk and to ensure review.***
- Each KCl order has been pre-defined to run at the appropriate rate as per PPG.
- The default duration of each order is “5 bags”. Click the drop-down arrow to change if appropriate.
- This can also be changed via the **Details** tab (right click and modify to access).
- After the prescribed number of bags have been administered, the order will discontinue, and doctors will have to place a new order if more bags are required.

Serum K+ < 3.5 mmol/L	
High Alert Sodium Chloride 0.29% with Potassium Chloride 10 mmol/100 mL intravenous solution (so...	100 mL, IV Infusion, Rate: 200 mL/hr, 5 bag(s) *Contains potassium chloride* 200 mL/hr = 20 mmol/hour
Serum K+ 3.5 - 4.5 mmol/L	
High Alert Sodium Chloride 0.29% with Potassium Chloride 10 mmol/100 mL intravenous solution (so...	100 mL, IV Infusion, Rate: 100 mL/hr, 5 bag(s) *Contains potassium chloride* 100 mL/hr = 10 mmol/hour
Serum K+ 4.6 - 5.5 mmol/L	
High Alert Sodium Chloride 0.29% with Potassium Chloride 10 mmol/100 mL intravenous solution (so...	100 mL, IV Infusion, Rate: 50 mL/hr, 5 bag(s) *Contains potassium chloride* 50 mL/hr = 5 mmol/hour
Serum K+ > 5.5 mmol/L : NO POTASSIUM INFUSION REQUIRED	

▼	100 mL, IV Infusion, Rate: 200 mL/hr, 5 bag(s) *Contains potassium chloride* 200 mL/hr = 20 mmol/hour
▼	100 mL, IV Infusion, Rate: 200 mL/hr, 10 bag(s)
▼	100 mL, IV Infusion, Rate: 200 mL/hr, 15 bag(s)

Details Continuous Details Or

Drug Form:

Route of administration:

*Duration:

*Duration unit:



9. Insulin Infusion

Select the insulin infusion order.

Right click and modify to view the **Continuous Details** tab.

Component Status

ENDO Diabetic Ketoacidosis (DKA), Insulin Infusion (Initiated Pending)

DKA - Insulin Infusion

<<< Refer to DKA Management in Adults procedure

Check potassium prior to commencement. Insulin infu

insulin aspart (novoRAPID) infusion 100 unit(s) in Sodium Chloride 0.9% 100 mL CONTINUOUS

***Note*:** Insulin has a rate of **TITRATE**, meaning that nursing staff can titrate the infusion as per policy without the doctor having to modify the order each time.

Details for **novoRAPID (additive) 100 unit(s) + So**

Details Continuous Details Order Comments Offset Detail

Base Solution	Bag Volume	Rate
Sodium Chloride 0.9% infusion 100 mL		TITRATE
Additive	Additive Dose	Normalized Rate
novoRAPID (additive)	100 unit(s)	
Total Bag Volume		100 mL

Review standard policy in the **Order Comments**. This can be edited if required, and will be 'face up' on the MAR for nursing staff to see.

Details for **novoRAPID (additive) 100 unit(s) + So**

Details Continuous Details Order Comments

Order comments

Titrate as per below BGL results:

BGL: <5.0mmol/L: | Withhold infusion for 1 hour. Re-co at 0.3 units/hour
Notify endocrinology registrar

BGL: 5.0-10.0mmol/L: | 1 unit/hour

BGL: 10.1-15 mmol/L: | 2 units/hour

10. Glucose Infusion

Select the glucose 5% infusion order.

***Note*:** This has been pre-defined as 1L to run over 8 hours. This can be modified if required prior to signing.

In this instance, glucose 5% has been built as a **truly continuous** infusion, meaning that nursing staff can continue to hang new bags as per policy without the doctor having to place a new order.

Component Status

ENDO Diabetic Ketoacidosis (DKA), Glucose Infusion (Initiated Pending)

DKA - Glucose Infusion

<<< Refer to DKA Management in Adults procedure

Once blood glucose falls to 15 mmol/L, commence gluc complete.

Glucose 5% in Water intravenous solution (glucose 5% infusion)



Orders For Signature

11. Click to review all orders that have been selected from all phases.

Click each infusion order to make modifications as required.

Category	Order Name	Order Type	Order Date/Time	Order Details
Patient Care	Blood Ketones - Bedside	Order	24/10/2020 20:14	24/10/2020 20:14 AEDT, 4 hourly, for 24 hr(s), Stop Date 24/10/2020 20:14 AEDT
	Blood Glucose Monitoring Bedside	Order	24/10/2020 20:14	24/10/2020 20:14 AEDT, 1 hourly
Continuous Infusions	sodium chloride 0.9% infusion (BAG BY BAG...)	Order	24/10/2020 20:14	1,000 mL, IV Infusion, Rate: 999 mL/hr, 1 bag(s), First dose BOLUS
	sodium chloride 0.9% infusion (BAG BY BAG...)	Order	24/10/2020 20:14	1,000 mL, IV Infusion, Rate: 1,000 mL/hr, 1 bag(s), First dose Second bag
	sodium chloride 0.9% infusion (BAG BY BAG...)	Order	24/10/2020 20:14	1,000 mL, IV Infusion, Rate: 500 mL/hr, 1 bag(s), First dose Third bag
	novoRAPID (additive) 100 unit(s) + Sodium ...	Order	24/10/2020 20:14	100 mL, IV Infusion, Rate: TITRATE, First dose 24/10/2020 20:14:00, Titrate as per below BGL results: BGL: <5.0mmol/L
	glucose 5% infusion 1000 mL	Order	24/10/2020 20:14	1,000 mL, IV Infusion, Rate: 125 mL/hr, First dose 24/10/2020 20:14:00, Commence once blood glucose falls to 15 mmol/L
	sodium chloride 0.29% with potassium chlori...	Order	24/10/2020 20:14	100 mL, IV Infusion, Rate: 100 mL/hr, 5 bag(s), First dose 24/10/2020 20:14:00, *Contains potassium chloride* 100 mL/hr = 10 mmol/hr
Pathology	Blood Gas Venous (BGL)	Order	24/10/2020 20:14	Collect Now, Spec Type: Blood, 24/10/2020 20:14 AEDT

12. Complete any mandatory fields, then **Sign** orders and **Refresh** the MAR / MAR Summary to review before communicating with nursing staff.

Note: As all infusions within this orderset are **Bag by Bag** or **Truly Continuous**, only the rate is displayed on the MAR (i.e. no infuse over time)

The BGL protocol can be viewed by hovering over the insulin infusion order.

Continuous Infusions

glucose 5% infusion 1,000 mL
1,000 mL, IV Infusion, Rate: 125 mL/hr, First dose 24/10/2020 20:14:00, Total volume (mL): 1,000
Commence once blood glucose falls to 15 mmol/L

Administration Information
Glucose 5% in Water intravenous solution

novoRAPID (additive) 100 unit(s)
Sodium Chloride 0.9% infusion 100 mL
100 mL, IV Infusion, Rate: TITRATE, First dose 24/10/2020 20:14:00, Titrate Plan: AS PER ORDER
COMMENTS, Total volume (mL): 100
Titrate as per below BGL results: BGL: <5.0mmol/L | Withold infusion for 1 hour, Re-com...

Administration Information
insulin aspart
Sodium Chloride 0.9%

sodium chloride 0.29% with potassium chloride 10 mmol/100 mL infusion (BAG BY BAG) 100 mL
100 mL, IV Infusion, Rate: 100 mL/hr, 5 bag(s), First dose 24/10/2020 20:14:00, Stop date 25/10/2020 01:13:00, Total volume (mL): 100
Contains potassium chloride 100 mL/hr = 10 mmol/hour

Administration Information
NaCl 0.29% with KCl 10 mmol/100 mL IVsol

sodium chloride 0.9% infusion (BAG BY BAG) 1,000 mL
1,000 mL, IV Infusion, Rate: 999 mL/hr, 1 bag(s), First dose 24/10/2020 20:14:00, Stop date 24/10/2020 21:13:00, Total volume (mL): 1,000
BOLUS

Administration Information
Sodium Chloride 0.9%

Glucose 5% in water intravenous solution

novoRAPID (additive) 100 unit(s)
Sodium Chloride 0.9% infusion 100 mL
100 mL, IV Infusion, Rate: TITRATE, First dose 24/10/2020 20:14:00, Titrate Plan: AS PER ORDER
COMMENTS, Total volume (mL): 100
Titrate as per below BGL results: BGL: <5.0mmol/L | Withold infusion for 1 hour, Re-commence at 0.3 units/hour
Notify endocrinology registrar

Administration Information
insulin aspart
Sodium Chloride 0.9%

sodium chloride 0.29% with potassium chloride 10 mmol/100 mL infusion (BAG BY BAG) 100 mL
100 mL, IV Infusion, Rate: 100 mL/hr, 5 bag(s), First dose 24/10/2020 20:14:00, Stop date 25/10/2020 01:13:00, Total volume (mL): 100
Contains potassium chloride 100 mL/hr = 10 mmol/hour

Administration Information
NaCl 0.29% with KCl 10 mmol/100 mL IVsol

sodium chloride 0.9% infusion (BAG BY BAG) 1,000 mL
1,000 mL, IV Infusion, Rate: 999 mL/hr, 1 bag(s), First dose 24/10/2020 20:14:00, Stop date 24/10/2020 21:13:00, Total volume (mL): 1,000
BOLUS

Administration Information
Sodium Chloride 0.9%

sodium chloride 0.9% infusion (BAG BY BAG) 1,000 mL
1,000 mL, IV Infusion, Rate: 999 mL/hr, 1 bag(s), First dose 24/10/2020 20:14:00, Stop date 24/10/2020 21:13:00, Total volume (mL): 1,000
BOLUS

Administration Information
Sodium Chloride 0.9%