

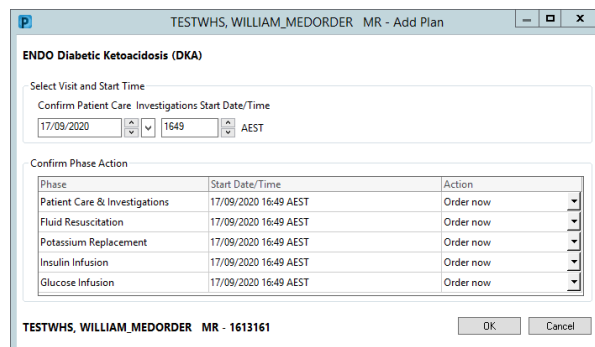
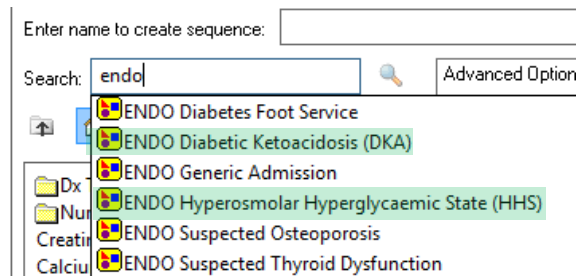


## EMR Quick Reference Guide

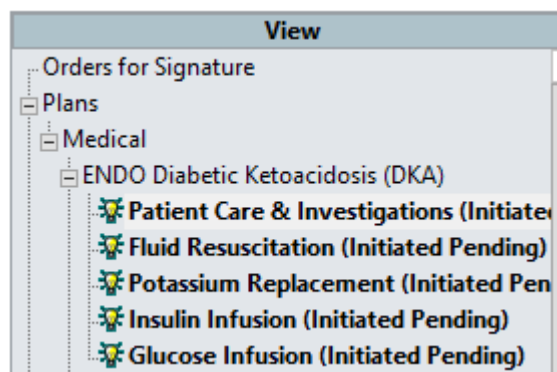
### Infusions – Ordering the Diabetic Ketoacidosis (DKA) Orderset

This QRG will cover ordering infusions via the ENDO DKA orderset, including Insulin

1. Go to **Orders** 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**



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



## 6. Patient Care & Investigations

Select all required orders.

**\*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.

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)
- Other:
  - Urea, Electrolytes and Creatinine (UEC)
  - Full Blood Examination (FBE)
  - C-Reactive Protein (CRP) Blood

## 7. Fluid Resuscitation

Select all required orders.

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

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

These can be modified if required prior to signing.

	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) <b>BOLUS</b>
	Sodium Chloride 0.9% intravenous solution (sodium chloride 0.9% infusion (BAG BY BAG))	1,000 mL, IV Infusion, 1 bag(s) <b>Second bag</b>
	Sodium Chloride 0.9% intravenous solution (sodium chloride 0.9% infusion (BAG BY BAG))	1,000 mL, IV Infusion, 1 bag(s) <b>Third bag</b>

## 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, 5 bag(s)

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 On

+

Drug Form:

Route of administration: IV Infusion

\*Duration: 5

\*Duration unit: bag(s)



## 9. Insulin Infusion

Select the insulin infusion order.

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

**\*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.

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.

Component: ENDO Diabetic Ketoacidosis (DKA), Insulin Infusion (Initiated Pending)  
 Status: [ ]  
**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

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)	
<b>Total Bag Volume</b>	<b>100 mL</b>	

Details for **novoRAPID (additive) 100 u**  
 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: ENDO Diabetic Ketoacidosis (DKA), Glucose Infusion (Initiated Pending)  
 Status: [ ]  
**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)

11. Click **Orders For Signature** to review all orders that have been selected from all phases.

Category	Order	Date/Time	Details
Patient Care	Blood Ketones - Bedside	24/10/2020 20:14	24/10/2020 20:14 AEDT, 4 hourly, for 24 hr(s), Stop Date 2
	Blood Glucose Monitoring Bedside	24/10/2020 20:14	24/10/2020 20:14 AEDT, 1 hourly
Continuous Infusions	sodium chloride 0.9% infusion (BAG BY BAG...	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...	24/10/2020 20:14	1,000 mL, IV Infusion, Rate: 1,000 mL/hr, 1 bag(s), First do Second bag
	sodium chloride 0.9% infusion (BAG BY BAG...	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 ...	24/10/2020 20:14	100 mL, IV Infusion, Rate: TITRATE, First dose 24/10/2020 Titrate as per below BGL results: BGL: <5.0mmol/L:
	glucose 5% infusion 1000 mL	24/10/2020 20:14	1,000 mL, IV Infusion, Rate: 125 mL/hr, First dose 24/10/20 Commence once blood glucose falls to 15 mmol/L
	sodium chloride 0.29% with potassium chlori...	24/10/2020 20:14	100 mL, IV Infusion, Rate: 100 mL/hr, 5 bag(s), First dose: *Contains potassium chloride* 100 mL/hr = 10 mmol/hc
	Pathology	Blood Gas Venous	24/10/2020 20:14



12. Click each infusion order to make modifications as required.
13. 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 order set 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: | Withhold 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 ORD  
COMMENTS, Total volume (mL): 100  
Titrate as per below BGL results: BGL: <5.0mmol/L: | Withhold 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%