

QRG – Ordering a DKA protocol

No.	Action	Responsibility
1.	<p>From the Request / Care Plans tab in PowerChart click on +Add and type in “DKA”</p>	Doctor / NMP
2.	<p>Click on the Powerplan and select to open the plan</p>	Doctor / NMP
3.	<p>Select any orders you want for your patient by ticking the boxes. Note that the referral to the diabetes nurses has already been pre-ticked and will automatically be requested for any patient on the DKA pathway.</p> <p> Monitoring <input checked="" type="checkbox"/> All patients presenting with DKA MUST be referred to the Diabetes Team <input checked="" type="checkbox"/> Referral to Diabetic Nurse DKA, Urgent <input type="checkbox"/> pH, Potassium, and Bicarbonate are monitored 2 hourly for the first 6 hours and then <input type="checkbox"/> Potassium level, blood <input type="checkbox"/> Bicarbonate level, blood <input type="checkbox"/> Blood Glucose, Ketones - use "Glucose (point of care)" order, Urine Output and GCS is <input type="checkbox"/> Glucose level, blood <input type="checkbox"/> Glucose (Point of Care) <input type="checkbox"/> Gas analysis, arterial blood <input type="checkbox"/> Vital Signs Adult </p> <p> Prescribing <input type="checkbox"/> Do not stop Long Acting Insulin (e.g. Levemir / Lantus / Tresiba) <input type="checkbox"/> Insulin Soluble Fixed Rate Infusion DOSE: 50 ml Stopping fixed rate insulin infusion once DKA has resolved: Blood ketones < 0.3 mmol/L Venous pH > 7.3 or / and Bicarbonate > 18 mmol/L If patient eating and drinking - Switch to usual insulin regime at next meal. If patient not eating or drinking - Switch to variable rate (sliding scale) insulin. </p> <p> FLUID REPLACEMENT: PATIENT IN SHOCK - If systolic Bp < 90 mmHg <input type="checkbox"/> Sodium chloride 0.9% (Sodium Chloride 0.9% Infusion) DOSE: 500 ml <input type="checkbox"/> +15 min Sodium chloride 0.9% (Sodium Chloride 0.9% Infusion) DOSE: 500 ml <input type="checkbox"/> +30 min Sodium chloride 0.9% (Sodium Chloride 0.9% Infusion) DOSE: 500 ml PATIENT NOT SHOCKED - If systolic Bp > 90 mmHg </p>	Doctor / NMP

4.

Tick the box for Insulin Soluble Fixed Rate Infusion to order the insulin infusion at 0.1kg/unit/hour.

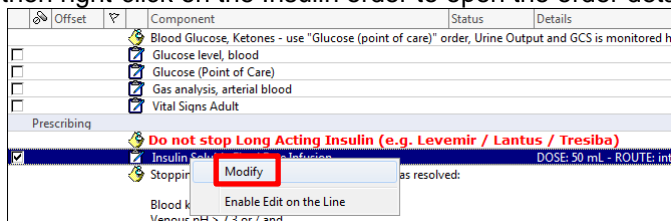
Doctor / NMP

IMPORTANT:

Note that the system requires a **weight** to calculate the infusion rate.

- If a **measured weight** has already been entered in the patient's record under assessments / Fluid Balance > Adult Assessments > Measurements, this will automatically populate the insulin infusion order and the rate will be calculated. Continue with step 6.
- If no measured weight has been entered, this can be added manually in the order. Please note that this will not pull through to the Assessments / Fluid Balance screen or any other order.

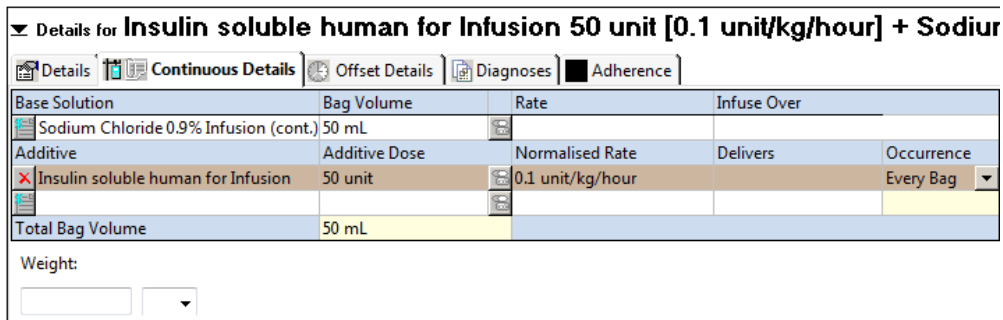
To manually enter a weight, select the insulin order by setting a tick next to it and then right-click on the Insulin order to open the order details



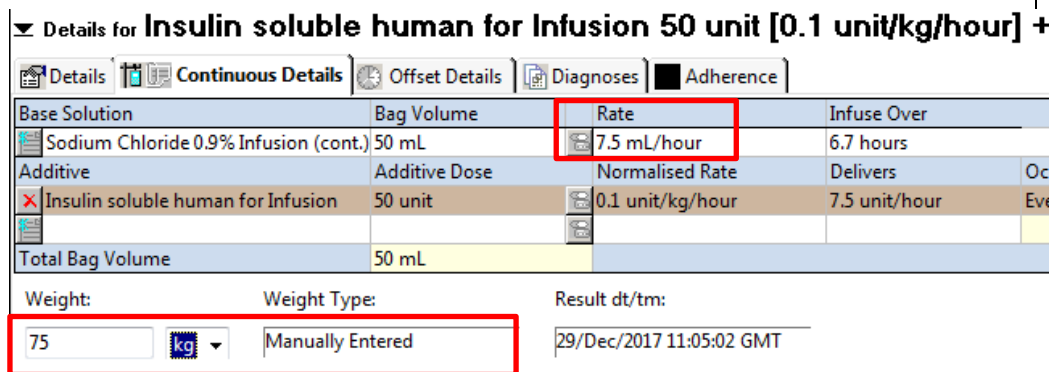
5.

Enter the weight manually (in kg)

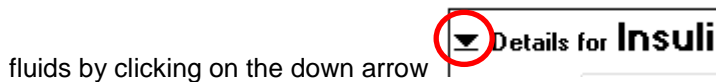
Doctor / NMP



A rate will calculate using the manually entered weight.



Minimise the order details to continue with selecting other items of the plan, such as



fluids by clicking on the down arrow

6. Select the appropriate fluid replacement Doctor / NMP

FLUID REPLACEMENT:

PATIENT IN SHOCK - If systolic Bp < 90 mmHg

<input type="checkbox"/>	<input checked="" type="checkbox"/>	Sodium chloride 0.9% (Sodium Chloride 0.9% Infusion)	DOSE: 500 mL - ROUT
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Sodium chloride 0.9% (Sodium Chloride 0.9% Infusion)	DOSE: 500 mL - ROUT
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Sodium chloride 0.9% (Sodium Chloride 0.9% Infusion)	DOSE: 500 mL - ROUT

PATIENT NOT SHOCKED - If systolic Bp > 90 mmHg

POTASSIUM REPLACEMENT

Aim to maintain between 4.0 and 5.0 mmol/L

Over 5.5 mmol/L	Nil replacement needed
3.5 - 5.5 mmol/L	40 mmol/L
Below 3.5 mmol/L	Senior Review Needed

First bag:

<input type="checkbox"/>	<input checked="" type="checkbox"/>	Sodium chloride 0.9% (Sodium Chloride 0.9% Infusion)	DOSE: 1,000 mL - ROI
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Second bag (choose either with or without potassium):

<input type="checkbox"/>	<input checked="" type="checkbox"/>	Sodium chloride 0.9% (Sodium Chloride 0.9% Infusion)	DOSE: 1,000 mL - ROI
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Potassium chloride + Sodium chloride (Potassium Chloride 0.3% (40mmol in 1,000mL) + Sodium Chlori...	DOSE: 1,000 mL - ROI

Third bag (choose either with or without potassium):

<input type="checkbox"/>	<input checked="" type="checkbox"/>	Sodium chloride 0.9% (Sodium Chloride 0.9% Infusion)	DOSE: 1,000 mL - ROI
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Potassium chloride + Sodium chloride (Potassium Chloride 0.3% (40mmol in 1,000mL) + Sodium Chlori...	DOSE: 1,000 mL - ROI

Fourth bag (choose either with or without potassium):

<input type="checkbox"/>	<input checked="" type="checkbox"/>	Sodium chloride 0.9% (Sodium Chloride 0.9% Infusion)	DOSE: 1,000 mL - ROI
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Potassium chloride + Sodium chloride (Potassium Chloride 0.3% (40mmol in 1,000mL) + Sodium Chlori...	DOSE: 1,000 mL - ROI

Fifth bag (choose either with or without potassium):

<input type="checkbox"/>	<input checked="" type="checkbox"/>	Sodium chloride 0.9% (Sodium Chloride 0.9% Infusion)	DOSE: 1,000 mL - ROI
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Potassium chloride + Sodium chloride (Potassium Chloride 0.3% (40mmol in 1,000mL) + Sodium Chlori...	DOSE: 1,000 mL - ROI

Sixth bag (choose either with or without potassium):

<input type="checkbox"/>	<input checked="" type="checkbox"/>	Sodium chloride 0.9% (Sodium Chloride 0.9% Infusion)	DOSE: 1,000 mL - ROI
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Potassium chloride + Sodium chloride (Potassium Chloride 0.3% (40mmol in 1,000mL) + Sodium Chlori...	DOSE: 1,000 mL - ROI

IMPORTANT:

Note that fluid replacement for patients in shock (i.e. 3x500mL NaCl 0.9% each infused over 15 minutes should all be selected in one go as the second and third bag has an **off-set of 15** minutes to the previous bag).

If the patient is not shocked, please note that when sequential bags of fluids are ordered, starting times /off-set needs to be entered manually. If for example an initial bag of Sodium Chloride 0.9% 1000mL over 1 hour, followed by a second bag of Sodium Chloride 0.9% 1000mL over 2 hours is to be ordered, the 2nd bag will have to have an off-set of 1 hour entered for it to start after the 1st bag has finished.

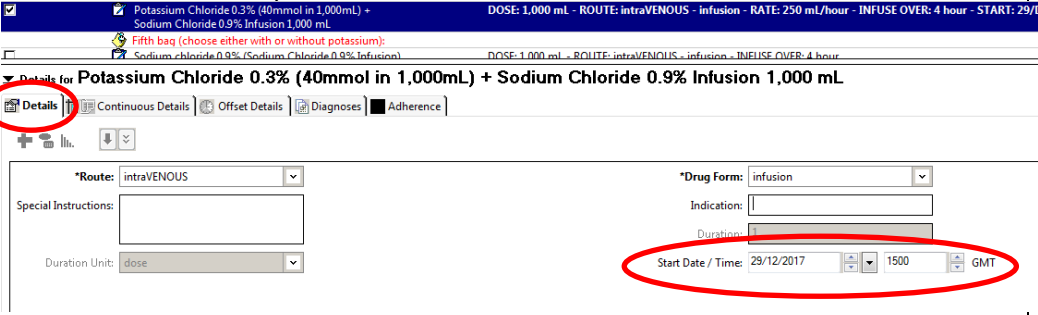




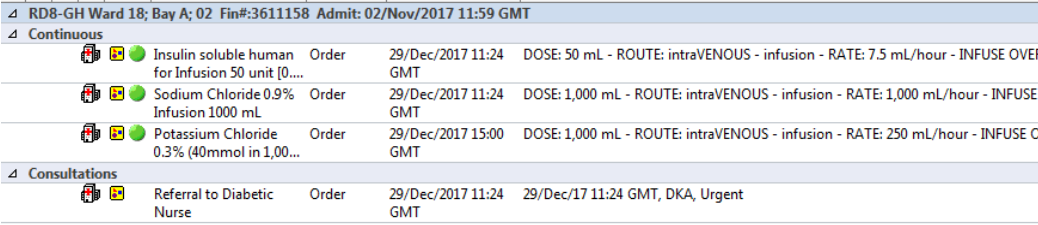
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Sodium chloride 0.9% (Sodium Chloride 0.9% Infusion)	DOSE: 1,000 mL - ROI
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Sodium chloride 0.9% (Sodium Chloride 0.9% Infusion)	DOSE: 1,000 mL - ROI
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Potassium Chloride 0.3% (40mmol in 1,000mL) + Sodium Chloride 0.9% Infusion 1,000 mL	DOSE: 1,000 mL - ROI
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Sodium chloride 0.9% (Sodium Chloride 0.9% Infusion)	DOSE: 1,000 mL - ROI
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Potassium chloride + Sodium chloride (Potassium Chloride 0.3% (40mmol in 1,000mL) + Sodium Chlori...	DOSE: 1,000 mL - ROI

Details for Potassium Chloride 0.3% (40mmol in 1,000mL) + Sodium Chloride 0.9% Infusion 1,000 mL

Insulin DKA (Initiated Pending)

Start offset:

To enter an Offset time, select the relevant bag (in this case the second), right-click on the order and select modify.

6.	In the order details, select tab “Offset Details” and enter the correct time, e.g. 1 hours	Doctor / NMP
7.	<p>Alternatively, a defined start time can be entered for the bag of fluid. To enter a start time, select the order, right-click modify and in the order select the tab “Details”. In this tab a specific Start Date / Time can be entered.</p> 	Doctor / NMP
8.	<p>When all orders have been selected (ticked), click </p>	Doctor / NMP
9.	<p>If at this point something was missing from one of the orders (for example a weight), then this would be denoted with  next to the orderable. Orders can only be signed, once all required fields have been completed. To do so, click on the item with the </p>	Doctor / NMP
10.	<p>Review orders and then click </p> 	Doctor / NMP
11.	Navigate to the drug chart to check that all meds have been ordered correctly.	Doctor / NMP
12.	<p>In order to view sections of the plan that have not been ordered, and to order items later on from the same plan, navigate to the Request / Care Plans tab in PowerChart. As a default, only items ordered off the plan will display. Click on the light-bulb to expand the view to the whole plan (including items not ordered and general information).</p>	Doctor / NMP

13.

Obstetrics View
Newborn Summary
Results Review
Requests/Care Plans + Add
Drug Chart
Task List
Assessments/Fluid Balance
Clinical Notes
Allergies + Add
Problems and Diagnoses
Form Browser
Histories

Orders Document in Plan

View

Orders for Signature
Plans
Document in Plan
Medical
Insulin DKA (Initiated)
ED TTO packs (Completed)
Ward 1 TTO packs (Completed)
Suggested Plans (3)
Orders
Non Categorised
Diet
Patient Care
Continuous
Medications

Insulin DKA (Initiated)
Last updated on: 19/Mar/2018 16:18 GMT by: Test, ClinPrac01

Continuous

General
 Referral to Diabetic Nurse

Monitoring
 Potassium level, blood

Prescribing
 Sodium Chloride 0.9% Infusion 500 mL
 +15 min Sodium Chloride 0.9% Infusion 500 mL
 +30 min Sodium Chloride 0.9% Infusion 500 mL

Insulin DKA (Initiated) 19/Mar/2018 16:18 GMT
Last updated on: 19/Mar/2018 16:18 GMT by: Test, ClinPrac01

Patient Care
 Blood Glucose POC

Continuous

Diagnosis
 Venous Blood Glucose > 11 mmol/L
Blood Ketones > 3 mmol/L
Acidosis: pH < 7.3 or / and Venous Bicarbonate < 15 mmol/L

If you are unsure of diagnosis please refer to Diabetes - intravenous insulin pathway selection plan.

General
 Severity Criteria - Consider HDU/ITU admission if:
Ketones > 6 mmol/L
Bicarbonate < 5 mmol/L
pH < 7.1
Potassium < 3.5 mmol/L
GCS < 12
Systolic BP < 90 mmHg
Heart Rate > 100 or < 60 bpm
Oxygen Saturation < 92%

All patients presenting with DKA MUST be referred to the Diabetes Team
 Referral to Diabetic Nurse Ordered 19/Mar/18 16:18:00 GMT, DKA, Urgent

Monitoring
 pH, Potassium, and Bicarbonate are monitored 2 hourly for the first 6 hours and then at 8 and 12 hours
 Potassium level, blood Ordered Bleep/tel no.: 1234, Coll priority: Urgent, Collection DT/TM: 19/Mar/18 16:18:0 (Awaiting Co...

Bicarbonate level, blood
 Blood Glucose, Ketones - use "Glucose (point of care)" order, Urine Output and GCS is monitored hourly
 Glucose level, blood
 Gas analysis, blood
 Vital Signs Adult

Prescribing
 Do not stop Long Acting Insulin (e.g. Levemir / Lantus / Tresiba)
 Insulin Soluble Fixed Rate Infusion DOSE: 50 mL - ROUTE: intraVENOUS - infusion
 Stopping fixed rate insulin infusion once DKA has resolved:

14.

If required, select items that need to be ordered from the plan by putting a tick in the respective box (see step 3). If additional details need to be completed, see step 9.

Doctor / NMP

Click and then click