

DIABETES PATIENT IMMEDIATE DISCHARGE LETTER (IDL) – ‘HOW TO’ GUIDE

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NOTE: this guide has been developed for the general paediatrics team to use if they are asked to prepare an IDL for a diabetes patient (ie when the diabetes team are not there to do so) with the aims being:

- to ensure correct prescribing of the discharge insulin(s) and glucose gel; and
- to highlight what basic information to include in the body of the IDL (including by use of a couple of worked examples); and
- to speed up the process for users.

HEPMA now allows the option of pulling through medications to the discharge IDL on Clinical Portal – **if you are using this option, YOU MUST ENSURE THAT HEPMA IS ACCURATE AND UP TO DATE AND REFLECTS THE PATIENTS DISCHARGE INSULIN PRESCRIPTIONS.** HOWEVER you will still need to add in the dosing free text details as set out in this guide and add the 40% glucose gel.

PART A: PATIENTS WITH NEWLY DIAGNOSED DIABETES

1. DISCHARGE MEDICATIONS:

New diabetes patients will be discharged on the following medications:

- 40% glucose oral gel.
- Long-acting insulin: **TRESIBA** (Insulin Degludec) or **LEVEMIR** (Insulin Detemir).
- Fast-acting insulin: **FIASP** (Fast Insulin Aspart) or **NOVORAPID** (Insulin Aspart).

2. HOW TO FIND AND INPUT MEDICATIONS on CLINICAL PORTAL for discharge:

GLUCOSE GEL:

- Search “glucose 40%” and the gel option will be clearly seen.
- For dosing, in ‘instructions’ select ‘free text’ then insert in text box:
 - ‘As directed by Diabetes Team’

LONG-ACTING INSULIN:

- Enter ‘Tresiba penfill’ or ‘Levemir penfill’ as appropriate in the search.
- If ‘penfill’ is included in the name the first or only option in each case should be the correct one:
 - ‘PENFILL 100 Units/ml solution for injection 3ml CARTRIDGE’
- For dosing in ‘instructions’ select ‘free text’ then insert in text box:
 - ‘As directed by Diabetes Team’

FAST-ACTING INSULIN:

- a. Enter 'Fiasp penfill' or 'Novorapid penfill' as appropriate in the search.
- b. If "penfill" is included in the name the first or only option in each case should be the correct one:
 - i. 'PENFILL 100 Units/ml solution for injection 3ml CARTRIDGE'
- c. For dosing, in 'instructions' select 'free text' then insert in text box:
 - ii. 'As directed by Diabetes Team'

NOTE: YOU DO NOT NEED to include Unit doses of long-acting insulin, Carb Ratios of fast-acting insulin or insulin dosing frequency. The Diabetes Service will advise the patient and family on this as it may change frequently.

3. ERRORS TO AVOID (beware similar names!):

- a. **Selecting single use Flexpen pens or Flextouch pens** instead of cartridges for refillable pens.
- b. **Selecting Novomix mixed insulin** instead of Novorapid fast-acting insulin.

4. SCREEN SHOT EXAMPLE (with Levemir/Novorapid) –this is how medications will appear on discharge IDL

Active Drug Name	Route	Dose	Disp	Reason	Further Details	ECS	Since Admission
Glucose 40% oral gel	oral	As directed by the diabetic team	Yes		Dispensing Details: 1op		Added
Levemir Penfill 100units/ml solution for injection 3ml cartridges (Novo Nordisk Ltd)	subcutaneous	as directed by the diabetic team	Yes		Dispensing Details: 5		Added
NovoRapid Penfill 100units/ml solution for injection 3ml cartridges (Novo Nordisk Ltd)	subcutaneous	as directed by the diabetic team	Yes		Dispensing Details: 5		Added

5. CLINICAL SUMMARY: INFORMATION TO INCLUDE IN 'NEW DIAGNOSIS' IDL

Diagnosis	New onset diabetes
Symptoms	Symptoms and symptom duration
Presentation	Where presented and initial test results
Family History	Any family history of diabetes or other autoimmune conditions
Clinical condition on arrival in ED/CDU	Clinical status on arrival, admission weight and height Initial gas/lab blood results
Management	DKA protocol/Walking wounded; flag any complications
Other Ix/Results	Diabetes screening blood test results if back (eg HbA1c/TFTs) Virology/microbiology results (if any) eg due to intercurrent illness
Discharge insulin regimen	Basal-bolus regimen
Follow up	OPC at 4-6 weeks with Diabetes Service, ongoing MDT review
Results awaited	outstanding results from new diabetes screen

6. WORKED EXAMPLE FOR IDL CLINICAL SUMMARY SECTION: NEW DIABETES PATIENT

Dear Doctor,

Diagnosis - new onset diabetes

Symptoms – 3 week hx of polyuria, polydipsia and weight loss

Presentation – BM at GP of 25, same day referral to ED

FHx – type 2 IDDM (mum)

In ED – clinically well, H+ 42, lab blood glucose 27, blood ketones 2.4, weight 25kg, height 140cm

Mx – walking wounded protocol

Other results – HbA1c 84, TFTs and TPO antibodies normal. Other diabetes screening bloods outstanding (adrenal antibody, coeliac screen, diabetes antibodies)

Discharge Insulin regimen – basal-bolus regimen

F/u: Diabetes OPC 4-6 weeks and ongoing MDT review

Ward 2C

RHC Glasgow

PART B: ESTABLISHED DIABETES PATIENTS

1. DISCHARGE MEDICATIONS:

GLUCOSE GEL:

- a. ALL patients require this on discharge.

INSULIN:

- a. **Basal-Bolus regimen:** Established diabetes patients taking subcutaneous injections of insulin will usually use a Basal-Bolus regimen of long-acting and a fast-acting insulin in the same way as a newly diagnosed diabetes patient. If so, follow Part A of this guide for prescribing the patient's insulin.
- b. **Combined insulin regimen:** Some established patients taking injected insulin may be on a regimen including a mixed insulin rather than a purely basal-bolus regimen. This common alternative (particularly in school-aged children) involves taking:
 - i. **Breakfast:** Mixed insulin; and
 - ii. **Evening Meal:** Long-acting insulin and fast-acting insulin.

NOTE: Mixed insulins are a combination of a fast-acting and intermediate-acting insulins, the most common ones being **Novomix 30 and Humalog Mix 25**. As intermediate-acting insulin taken at breakfast peaks around midday, a lunchtime injection is not required, and a mixed insulin is useful for any who cannot or will not take insulin at lunchtime.

Mixed insulins as a whole act VERY DIFFERENTLY to their individual components. PLEASE TAKE EXTRA CARE WHEN PRESCRIBING!

For such a patient, see section 2 below for the combined insulin regimen.

- c. **Pump-delivered insulin:** For insulin pump users, you need to prescribe the insulin that they use in the pump (which will be a fast acting insulin - usually Novorapid but occasionally Fiasp or Humalog). Follow Part A of this guide for prescribing fast acting insulin (it is still the penfill 3ml cartridges that are prescribed).
- d. **Off pump s/c injections:** Insulin pump users may also be prescribed long-acting and fast-acting insulin for off-pump dosing via injections and if so, this can be prescribed as set out in Part A of this guide.

2. HOW TO FIND AND INPUT THE MEDICATIONS on CLINICAL PORTAL for discharge:

GLUCOSE GEL: (all patients) – prescribe as set out in Part A of this guide.

BASAL-BOLUS INSULIN REGIMEN:

LONG-ACTING INSULIN: - prescribe as set out in Part A of this guide.

FAST-ACTING INSULIN: - prescribe as set out in Part A of this guide.

COMBINED INSULIN REGIMEN:

MIXED INSULIN:

- a. Enter 'Humalog Mix25/ Humalog Mix50/ Novomix 30/ Humulin M3' (as applicable) '3ml cartridges' in the search. The brand can be selected.
- b. For dosing, in 'instructions' select 'free text' then insert in text box:
 - i. *'as directed by Diabetes Team'*

LONG-ACTING INSULIN: - prescribe as set out in Part A of this guide.

FAST-ACTING INSULIN: - prescribe as set out in Part A of this guide.

NOTE: YOU DO NOT NEED to include Unit doses of long-acting insulin or mixed insulin, Carb Ratios of fast-acting insulin or insulin dosing frequency. The Diabetes Service will advise patient and family on this as it may change frequently.

3. ERRORS TO AVOID (beware similar names!):

- a. **Selecting single use Flexpen pens or Flextouch pens** instead of cartridges for refillable pens.
- b. **Selecting mixed insulin rather than single component insulin or vice versa**, as previously flagged.
 - i. E.g., NOVOMIX vs NOVORAPID
 - ii. E.g., HUMALOG MIX 25 vs HUMALOG

4. EXAMPLE (combined insulin regimen of Novomix, Levemir and Novorapid) – this is how medications will appear on discharge IDL (1st 3 columns only shown)

Active Drug Name	Route	Dose
Glucose 40% oral gel	oral	As directed by Diabetes Team
Novomix 30 Penfill 100 units/ml suspension for injection 3ml cartridges (Novo Nordisk Ltd).	subcutaneous	As directed by Diabetes Team
Levemir Penfill 100units/ml solution for injection 3ml cartridges (Novo Nordisk Ltd).	subcutaneous	As directed by Diabetes Team
Novorapid Penfill 100units/ml solution for injection 3ml cartridges (Novo Nordisk Ltd).	subcutaneous	As directed by Diabetes Team

5. CLINICAL SUMMARY: INFORMATION TO INCLUDE IN ESTABLISHED DIABETES PATIENT IDL

Existing diagnosis	Diagnosis
Admission insulin regimen	Existing insulin regimen (eg basal - bolus or combined insulin regimen or insulin pump). Use of continuous glucose monitoring system (eg Dexcom, Libre, Guardian)
Presentation	Presenting symptoms; any triggers (eg intercurrent illness, not taking insulin correctly, poor control); any steps taken at home prior to presentation at hospital
Clinical condition on arrival in ED/CDU	Clinical status on arrival, admission weight and height Initial gas/lab blood results
Management	Acute management (eg pump stopped /DKA protocol/ walking wounded protocol/variable rate insulin infusion/managed with s/c insulin); flag any complications
Other Ix/Results	Eg Repeat HbA1c; Virology/microbiology results (if any) due to intercurrent illness
Discharge insulin regimen	Eg No change/change to combined insulin regimen/taken off pump and put to basal-bolus
Follow-up	With Diabetes Service as arranged
Results awaited	Eg outstanding Virology/ Microbiology if infection screen sent.

6. WORKED EXAMPLE FOR IDL CLINICAL SUMMARY SECTION: ESTABLISHED DIABETES PATIENT

Dear Doctor,

Diagnosis: Type 1 Diabetes

Insulin regimen on admission: basal bolus insulin regimen of Tresiba and Fiasp, using Libre sensor

Symptoms – short history of diarrhoea

Presentation – BM of 27 and ketones of 3.4 at home, still eating and drinking, not following sick day dosing rules and missing insulin doses at school

In ED – stable, not dehydrated, H+42, lab blood glucose 27, blood ketones 3.6

Mx – overnight admission, 2 ketone doses, BM and ketone monitoring

Discharge Insulin regimen – changed to combined insulin regimen on discharge (mixed insulin, long acting and fast acting insulin)

Follow up: early Diabetes outpatient follow up

Ward 2C

RHC Glasgow