

Implementing the **Integrated Hypoglycaemic Pathway**

Foreword

The London Ambulance Service NHS Trust (LAS) attends approximately 20,000 diabetic emergencies per year. This represents a significant number of patients for the LAS, and highlights significant issues in the care and management of Diabetes. Hypoglycaemic and hyperglycaemic events are serious diabetic emergencies and may result in long term complications. Hypoglycaemia is a major cause of morbidity, often requiring third party involvement, Emergency Department attendances and hospitalisation. The cost to the individual is hard to capture and may include economic, psychosocial and in some cases significant health implications.

The Health Innovation Network and London Ambulance Service NHS Trust have worked in partnership to develop and implement an improved referral pathway for people who require LAS assistance for a hypoglycaemic episode and are not conveyed to hospital following treatment at the scene.

This integrated hypoglycaemic pathway met the NICE guideline Diabetes in Adults Quality standard 15 (2011). 'People with diabetes who have experienced hypoglycaemia requiring medical attention are referred to a specialist diabetes team.' Quality measure 'Evidence of local arrangements to ensure that people with diabetes who have experienced hypoglycaemia requiring medical attention are referred to a specialist diabetes team.' Specialist diabetes teams have the required skills and experience to provide the right clinical advice and interventions for people who are experiencing episodes of severe hypoglycaemia.

The Health Innovation Network and the London Ambulance Service NHS Trust thank the following diabetes specialist services and CCGs for being involved in the project and contributing to the design of the implementation resources.

Hounslow and Richmond Community Health Care NHS Trust and Richmond CCG

Guys and St Thomas's NHS Foundation Trust, Southwark and Lambeth CCG

This guide has been designed to assist all London CCGs and diabetes specialist providers to implement the LAS Hypoglycaemic Pathway within their borough, using the tools and resources that were designed and tested during the pilot project.



Jaqui Lindridge
Consultant Paramedic:
London Ambulance Service



Dr Neel Basudev
Clinical Director Diabetes:
Health Innovation Network

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Severe hypoglycaemia can be devastating for both the person experiencing it and for their families. Too often, it goes underreported, because people have tried and failed to avoid it for too long. But with new understanding of its drivers and new technologies for diabetes management, severe hypoglycaemia can be made avoidable. This new pathway is very exciting because it will enable people with diabetes experiencing severe hypoglycaemia to access the help they need to stop it happening.

Stephanie A Amiel
RD Lawrence Professor of
Diabetic Medicine
King's College London

The Integrated Hypoglycaemic pathway

Between 2014 and 2016 the Health Innovation Network (HIN) and London Ambulance Service NHS Trust (LAS) collaborated on a project to improve the integration of care pathways for the management of hypoglycaemia. The project was supported by joint working arrangements between HIN and MSD pharmaceutical company. The joint working was conducted in line with ABPI guidance for joint working between pharmaceutical companies and the NHS.

This project led to the development of an integrated hypoglycaemic pathway for use by all LAS ambulance clinicians, which is shown in **Figure 1**. The aim of the pathway is to provide an integrated care service that contributes to the reduction of serious hypoglycaemic episodes. LAS, with support from HIN, has worked with staff internally to promote and embed this pathway.

The focus of this project was on improving the quality of follow up that patients managed at home by ambulance clinicians receive. Using the recommendation of NICE Quality Standard 15 (2011) we worked with CCGs to change the referral pathway in order that specialist diabetes teams could receive direct referrals from the LAS relating to patients who were not conveyed to hospital following treatment for hypoglycaemia. In CCGs which have not yet adopted the pathway, LAS practice is to refer patients to their GP.

Information from the 2015/16 pilot indicated that referrals did not exceed 2 patients a week per CCG. Other CCGs considering implementation of similar pathways are advised to review local LAS data relating to hypoglycaemic events managed at home by ambulance clinicians.



Hypoglycaemia is preventable. This integrated Hypoglycaemic Pathway enables healthcare professionals to support anyone who experiences an event and prevent future occurrences. Dr Natasha H Patel Consultant in Diabetes, Guys and St Thomas' NHS Foundation Trust

Figure 1

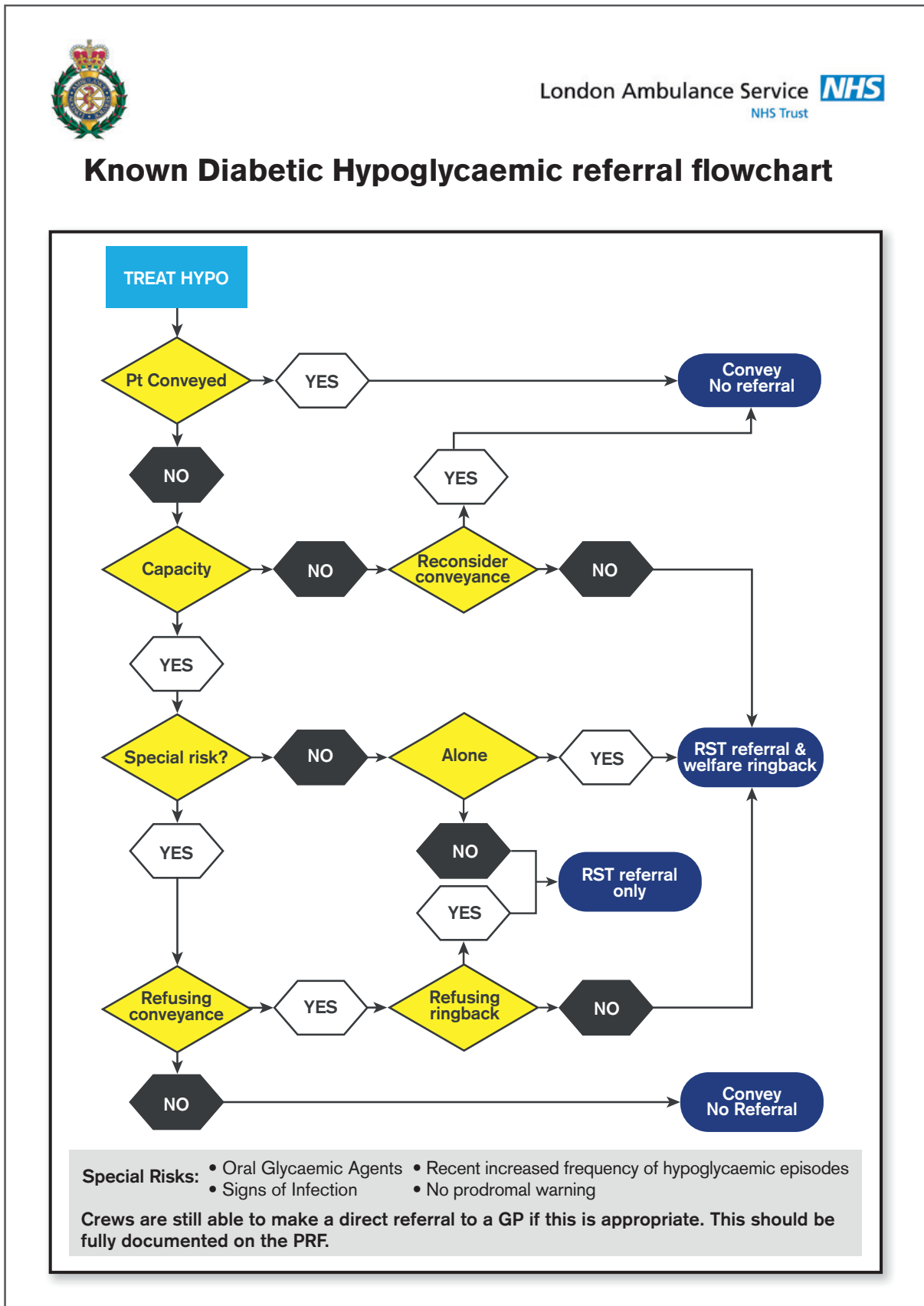


Figure 1

Hypoglycaemia Referral Pathway FAQs

<p>Who should I refer? Insulin dependent patients who have had an episode of hypoglycaemia, have recovered and are not being conveyed to hospital. Patients who are on oral glycaemic agents and refusing conveyance to hospital.</p> <p>How do I make a referral? Call RST via the radio handset</p> <p>What will RST do with the information? They will arrange for the Clinical Hub to contact the patient by telephone in two hours if needed. A referral will be sent to the patient's GP or specialist team.</p> <p>Is it more beneficial to contact the patient's GP directly during office hours? In some situations it may be appropriate to make a same day referral direct to the patient's GP or OOH provider. This should be documented on the PRF. This may be of benefit for a patient with special risks who is refusing conveyance.</p> <p>Can I refer a patient who is taking oral medication for their diabetes? These patients should always be conveyed to hospital. However, if they refuse conveyance, they should be referred. They should also have a welfare ringback from the Clinical Hub.</p>	<p>If the patient has recovered and is left in care, should I still make a referral? Yes – This can be completed via RST. It is important that any patient who has had a hypoglycaemic episode and is not conveyed has a referral to their GP or specialist team. This should help to prevent future episodes.</p> <p>Should patients considered high risk or at special risk be conveyed? Yes – these patients are at greater risk of further hypoglycaemic episodes.</p> <p>If the patient does not give consent for a referral, am I allowed to make one anyway? Yes – Caldicott 2 allows us to make a referral in this situation if the clinician thinks it is appropriate.</p> <p>Should I make a referral if the patient has already recovered on our arrival? Yes – It is still important that the GP/specialist team is made aware as the patient's medication may require a review.</p> <p>Should I make a referral if the patient has refused transport against our advice? Yes – Patients should be made aware of the risks of not attending the ED. It is important that a GP referral is made so that the patient's condition can be reviewed by a GP or specialist team.</p>
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Implementation of the Hypoglycaemic Pathway for London CCGs and diabetes specialist providers

Step 1: Identify key stakeholders

Identifying the relevant organisation leads is the first step to successful implementation of the Hypoglycaemic Pathway.

The following list provides the key representatives required and can be adapted to add other relevant local key organisations/individuals:

- CCG diabetes commissioner
- CCG diabetes lead GP
- Single Point of Access Service
- Diabetes specialist service
- Local LAS lead for Operations and Medical Directorates

Identify the CCG lead who holds responsibility for signing off the completed Hypoglycaemic Pathway Checklist prior to commencement.

Step 2: Planning meeting with key stakeholders

1. Arrange a face to face meeting with all of the key representatives present.
2. Use the Checklist ([see resources](#)) to inform the meeting.
3. Assign leads for each element of the checklist and agree a timeframe for completion, our suggested timeframe is 6 weeks.
4. Inform the Local LAS lead for Operations and Medical Directorates of your intention to implement the Hypoglycaemic Pathway, including the anticipated time frame

Step 3: Preparation for launch

Completion of the tasks within the checklist takes place at this time. The success of the pathway is reliant on good communication. The following resources (see resources section) have been made available from the pilot CCGs and providers for use and adaptation and include:

- GP Communication & local pathway algorithm
- LAS referral form
- Data collection template
- Diabetes Specialist Nurse feedback to LAS template
- Signed Agreement

Step 4: Final checks

Complete the final requirements of the Hypoglycaemic Pathway Checklist

- Ensure the LAS lead for Operations and Medical Directorates receive the completed signed agreement for approval at least 2 weeks prior to the go live date
- The LAS lead for Operations and Medical Directorates will liaise directly with the LAS referral support team to embed and commence the new pathway for the agreed start date

Step 5: Monitoring and Evaluation

The pathway is now live, continue to work together to inform any future improvements in the pathway

- Monitor the referrals and feedback to the LAS
- Consider staff and patient feedback on the effectiveness of the pathway
- Capture the data to inform future commissioning

Resources

These resources are provided to assist CCGs and Ambulance services to develop their own local versions.

Implementation of hypoglycaemia referral pathway between LAS and X Diabetes specialist Diabetes team

X Diabetes service has been working with X CCG to develop and implement an improved referral pathway for people who have needed London Ambulance Service assistance for a hypoglycaemic episode. This pathway was designed to meet the NICE guideline Diabetes in Adults Quality standard 15 'People with diabetes who have experienced hypoglycaemia requiring medical attention are referred to a specialist diabetes team' Quality measure 'Evidence of local arrangements to ensure that people with diabetes who have experienced hypoglycaemia requiring medical attention are referred to a specialist diabetes team'. 2011

Specialist diabetes teams have the required skills and experience to provide the right clinical advice and interventions for people who are experiencing severe hypoglycaemia.

X Diabetes team has developed a pathway as described in the attached clinical algorithm and below. X Diabetes team understands that it carries full clinical and governance accountability for the new pathway and that it has approval from X CCG, Trusts or other accountable provider to implement this pathway. The pathway will apply to patients with all types of Diabetes in line with similar pathways implemented in other parts of the UK.

The purpose of this document is to confirm that all clinical, communication and governance risks around pathway implementation have been correctly mitigated and that roles and responsibilities are clear.

Hypoglycaemia Pathway Checklist
67kb | [Download](#)

London Ambulance Service NHS Trust

Date of referral: _____ Time of referral: _____ Crew call-sign: _____
 CAD No.: _____ CAD date: _____ ISD Handset No.: _____

NHS Number: _____ Patient's Name: _____ M F _____ GP's Name: _____ GP address: _____
 GP's Phone No.: _____

Date of birth: _____ GP's Fax No.: _____ Postcode: _____

Patient's phone number: _____ Care's name/contact number (if appropriate): _____ Are you aware of the patient having a care package? Yes No
 Postcode: _____ Does the patient speak English? Yes No

Reason for call/presenting complaint (including injuries sustained/cause of event if known): _____

Medical History (tick as appropriate):
 Previous falls
 Type1 Diabetes
 Type2 Diabetes
 Other Diabetes
 Hypertension
 CVA/TIA4
 Cardiac Conditions
 Epilepsy
 Dementia

General observations:
 G.C.S.: _____ Pulse rate: _____ Respiratory rate: _____

Falls referrals only: Has the patient fallen? Yes No
 When seated on a chair at knee height, can the patient stand without using their arms? Yes No
 Does the patient have balance? Yes No

Diabetes referrals only: Initial blood glucose: _____ Discharge blood glucose: _____ Details of any treatment given to resolve episode: _____

LAS referral form
351kb | [Download](#)

Hypoglycaemia referral pathway: signed agreement

From insert date onwards the London Ambulance Service (LAS) Referral Support Team (RST) will send referrals for all patients who are registered with a GP in the insert CCG via email to insert specialist team name.

The referrals will be made to insert specialist team name at insert secure email address (nhs.net). The specialist team will respond to the referrals in accordance with the locally agreed protocol which is referenced in the implementation checklist which has already been signed off by the specialist team and CCG.

Every GP practice in the insert CCG will be informed of the change of pathway prior to implementation.

Signed _____
 CCG commissioner on behalf of GPs

Signed _____
 Diabetes Specialist team

Signed agreement
423kb | [Download](#)

Hounslow and Richmond Community Healthcare NHS Trust

Dear Colleagues August 2015.

Re new HYPOLYCAEMIA ALERT PATHWAY

Hypoglycaemia is one of the most serious adverse effects of medications for diabetes and can be a recurrent problem causing an adverse effect on quality of life and may result in falls, fractures and admissions to hospital. Guidance recommends that people with diabetes experiencing severe hypoglycaemia, requiring the assistance of third parties such as the ambulance service should have their management reviewed by the diabetes specialist service.

HRCH has worked with other members of Richmond CCG, LAS and Health Innovation Network to set up a service whereby patients calling 999 are assessed and treated by the paramedic team and transferred to hospital for further management if needed. If admission not required patient is then referred to the Diabetes Specialist Nurse Team based at Teddington Memorial Hospital where the patient will be contacted by phone within 48 hours or next working day if referred over weekend.

Patient will be advised on preventing and treating hypoglycaemia and if Diabetes control unstable will be reviewed in clinic or at patients home. Written information will be given to patients re hypoglycaemia and promotion of self-management. GPs will receive notification of referral and outcome.

Please see attached pathway and notification form.

GP practices will continue to be notified by LAS regarding the 999 call out.

This is a six month trial and service will be audited throughout trial period. The service starts on **September 1st 2015**.

If you have any queries or would like further information please do not hesitate to contact HRCH Lead Diabetes Specialist Nurse

Example of GP communication and local pathway algorithm
884kb | [Download](#)

A data collection template featuring a large green 'X' over a grid pattern, representing a spreadsheet or data table.

Data collection template
90kb | [Download](#)

Hypoglycaemia referral feedback form

Please fill in for every patient referred from the London Ambulance Service and return it by email to diabetes.feedback@lond-amb.nhs.uk

Patient Name: _____
 Patient DOB: _____

Contact type:
 Telephone consultation
 Face-to-face appointment
 Other

Action taken:
 Referred to GP
 Medication adjustment
 Advice
 Referred to other service
 Patient informed of duty to inform DVLA
 Safeguarding Referral
 Other

How many hypoglycaemic episodes has the patient had in the last year? _____

DSN feedback to LAS template
27kb | [Download](#)