National Emergency Medicine Programme

Guidance on the Management of Patients in Emergency Departments who Leave Before Completion of Treatment (LBCT)

Date: 8th June 2022

Table of Contents

Disclaimer

This guidance has been developed to act as a resource for clinicians involved in the management of patients who leave before completion of treatment and for hospital/group teams with governance and managerial responsibility for ED services. It is not intended to replace clinical judgement and cannot cover all clinical scenarios. The ultimate responsibility for the interpretation and application of this guidance, the use of current information and patient care and wellbeing resides with the relevant health care providers including clinicians, hospital/group and health service managers as appropriate to their roles.

1. Purpose

This document aims to assist Emergency Department (ED) teams in managing the clinical risk associated with patients leaving EDs and Injury Units (IUs) before completion of their episodes of care and discharge by an emergency care clinician. It also provides guidance on minimising the numbers of patients who Leave Before Completion of Treatment (LBCT) and measures to improve the quality and patient experience of care while they are in the ED or IU. Implementation of this guidance will:

- Support data quality, monitoring and reporting of LBCT rates for the access Key Performance Indicator recommended by the National Emergency Medicine Programme (EMP)[1] which recommends a KPI rate of fewer than 5% of patients leaving before completion of treatment.
- Enable ECNs and the health system to comply with the HIQA recommendation[2] that "All hospitals providing an emergency department service should undertake a periodic analysis of the types and profiles of patients who re-attend or leave without being seen and the underlying causes for re-attendance. Any potential improvements identified as a result should be implemented and evaluated."

2. EMP definition of 'Leaving Before Completion of Treatment'

The EMP applies the term "Left Before Completion of Treatment" to all patients who register but leave the ED or IU prior to discharge by a clinician. In the absence of an international consensus definition for patients who LBCT, this approach covers all identifiable patients who may leave before formal discharge. Patients who arrive at EDs but fail to register are not included as there is no hospital record of their ED/IU attendance.

The UK A&E Clinical Quality Indicator[3] excludes patients who have seen a decision maker, whereas the EMP definition includes all new patients from the time of registration to leaving the ED/IU, if the patient has not been formally discharged by a treating clinician i.e. a registered medical practitioner or an Advanced Nurse Practitioner. The EMP definition includes:

- Patients who register but are not triaged,
- Patients who leave after triage but before being seen by a treating clinician (commonly referred to as patients who did not wait - DNW),
- Patients who have been assessed by a treating clinician but communicate their intention to leave against medical advice (AMA)
- Patients who have been assessed and leave before formal discharge.

This broader definition of LBCT has been applied to capture the most comprehensive data possible regarding patients who do not complete treatment in ED/IUs.

The 5% rate for LBCT is a pragmatic indicator target for EDs. EDs should monitor data to detect any adverse trends early, sustain and further improve good practice. LBCT rates of zero are unrealistic given the right of

adult patients with capacity to decline treatment. There is no high-quality research evidence to define appropriate LBCT rates and international data must be interpreted with caution as different definitions apply. The 5% rate is a pragmatic approach to a complex issue based on review of international experience in this field.

3. Patient safety and quality of care

The patient's safety, clinical needs and experience of care must be the primary consideration in all matters relating to the management of patients who LBTC. Patients who leave EDs may experience adverse events[4], though research has demonstrated that the risk of significant clinical incidents among these patients is low.[4,5,6,7] An Australian study demonstrated that patients who left EDs without being seen were at lower risk of hospital admission and at no greater risk of mortality but were of higher risk of re-presenting to an ED compared to patients who complete treatment and are discharged home.[6] Similar findings were demonstrated in a large study in Canada that also found a low risk of adverse outcomes patients among patients who left EDs with high LBCT rates.[5] A large single-centre study in Iceland found that patients who did not wait to be seen had an increased rate of ED re-attendance but not of hospitalisation, whereas patients who left against medical advice had increased rates of ED return and subsequent hospital admission.[7] Patients who LBCT were generally from lower acuity triage categories and young adults.[5,6]

A study from Beaumont Hospital[8] where the notes of all patients who Left Before Completion of Treatment (LBCT) over a twelve month period in 2008 were reviewed by a senior emergency physician, resulted in 3.7% of these patients being recalled. Of those recalled, 9.4% (i.e. 0.35% of the patients who left before completion of treatment) were admitted to hospital. The EMP recommends that a formal process for review of LBCT patients, appropriate to resources available and perceived level of clinical risk, be implemented.

4. The significance for the health system of ED patients leaving before completion of treatment

LBCT rates are recognised as an indirect measure of ED crowding and are used as an emergency system quality and access indicator in the UK[3] and Ireland. Research has consistently indicated that LBCT rates are directly linked to the wait time to see a doctor[5] and overall ED waiting times.[3,9] Delay to see a doctor is a function of medical staffing levels in the ED, with other factors such as ED crowding, nurse staffing and skill-mix, poor ED infrastructure and inefficient processes contributing to delays.[2] In addition to the impact on patient experience, high rates of LBCT indicate avoidable waste[1] associated with incomplete episodes of care and repeat ED attendances.

5. Capacity to consent and the right to refuse medical treatment

Adult patients have the right to refuse treatment offered and to leave an ED/IU, if they have the capacity to make this decision. Capacity is a legal term that describes a person's ability to understand, consider, retain, decide and communicate a course of action.[10,11] The preferred test of mental capacity is individualised and based on the personal capacity of the patient making the decision in question and the decision being made.[10,11] A patient who expresses the wish to leave an ED/IU against medical advice should ideally have their capacity to make this decision assessed by a senior clinical decision maker. There is a risk that senior clinical decision maker may not be immediately available to assess a patient's capacity because of conflicting clinical demands and where there are medical staffing shortages and crowding. Adults are always assumed to have capacity to make healthcare decisions unless the opposite is proven.[10]

The right to refuse medical treatment is enshrined in the 'unenumerated' rights protected by the state and legal opinion indicates that the "consent that is given by an adult of full capacity is a matter of choice"[10] and an adult with capacity can make decisions "for their own reasons"[10] which means in effect that ED/IU staff must respect the decision of adults who have capacity to leave the ED/IU against medical advice even if they do not agree with or understand the patient's reasons for leaving.

The care of patients who threaten to LBCT but who do not have capacity requires special consideration and the early involvement of senior EM clinicians. Capacity may be impaired temporarily (e.g. mental illness, delirium, severe intoxication) or permanently (e.g. dementia, brain injury). Assessment of may require the additional clinical expertise of a Psychiatrist.

6. Governance

The management of patients who LBCT falls within the governance remit of the hospital and its responsibility to deliver good quality and safe care within the available resources.[2] Hospital/group boards and management teams are responsible for creating the conditions whereby EDs have low LBCT rates. The EMP recommends that a formal process for review of LBCT patients, appropriate to resources available and perceived level of clinical risk in the particular patient population in that ED/IU, be implemented in each ED/IU. This guidance is intended to assist hospitals in the formulation of policies and procedures to execute the duty of care to the patient and supplements the recommendations of The National Emergency Medicine Programme Report 2012[1]. These include improving patient access, reducing waiting times in EDs, governance and workforce recommendations to support safe, high quality ED patient care. All EDs/IUs should have documented policies in place to direct and support the care of patients who leave before completion of treatment and all ED clinicians should adhere to best practice recommendations with regard to patient's clinical care, capacity, consent and child protection.

7. Strategies to reduce clinical risk

Factors that impact on LBCT rates include complex local demographic, cultural and socioeconomic factors, many of which are outside the control of the ED/IU.

The factors that are within the control of the health system should be addressed:

(a) Research demonstrates that ED crowding and prolonged waiting times are major causes of patients leaving before completion of treatment.[5-7] LBCT rates are considered a surrogate marker of ED crowding. ED crowding must be addressed through health system-wide measures. Compliance with the 6-hour ED standard and initiatives to reduce avoidable delays for ED patients should reduce LBCT rates. (For further information see National Emergency Medicine Programme Report Section 19)

(b) Delays to registration, triage and waiting to see a doctor or Advanced Nurse Practitioner should be prevented to minimise clinical risk.

(c) ED medical staffing levels and skill-mix should be optimised to prevent delays for patients and to ensure that doctors can make themselves available when required to assess patients who wish to leave against medical advice, without compromising the care of other patients.

(d) EDs should have clinical procedures in place to identify and manage patients who are likely to be at increased risk of adverse events if they LBCT. These may include vulnerable adults such as patients with mental health needs, those who present as a result of domestic violence and those with other complex psychosocial needs e.g. substance misuse. These patients may have the capacity to make the decision to leave but should be offered access to appropriate support after they LBCT such as medical social worker follow-up or contact information for community-based support groups. Review of LBCT patient profiles may identify specific patient cohorts for whom additional support is required. The specific management of patients who are at risk of self-harm or of harming others is outside the scope of this guidance document.

8. LBCT Protocol

ED/IUs should have protocols in place to guide the management of patients who express the wish to LBCT and those who leave the ED/IU without informing staff. These protocols should include the following guidance:

(a) When patients are found to have LBCT without informing staff, an immediate patient-specific risk assessment based on available information, should be undertaken by an experienced Nurse to decide if recall of the patient is necessary.

(b) A Nurse should be informed if a patient expresses a wish to leave the ED/IU to a non-clinical staff member e.g. receptionist.

(c) If the nurse has concerns in relation to capacity of the patient to understand the implication of LBCT, a suitably trained doctor should undertake an assessment of capacity and document this assessment.

(d) Any documentation signed by the patient (e.g. an AMA form) should be retained in the patient's clinical notes.

(e) There should be an appropriate response including escalation to a senior clinical decision-maker in the clinical management of patients who do not have capacity to refuse treatment but who declare an intention to leave. A patient-specific assessment of the circumstances, relative-risk, option appraisal and most appropriate management will be required for each such event. A hospital team approach may be required in some cases and may include EM, other relevant specialties and services – most commonly psychiatry and medical social work - hospital management and legal services. Detailed guidance on the management of such cases is outside the scope of this document.

(f) . Effective patient communication should help to ensure that patients feel welcome to return to the ED/IU in future.

(g) EDs/IUs should ensure that a GP letter is generated for all patients who LBCT, once electronic communication with GPs becomes available.

9. Staff support, education and training

All new clinical staff should receive training on the management of patients who LBCT as part of their orientation when they start work in the ED/IU. There should be on-going education for staff on the management of the patient cohorts who may LBCT and issues relating to capacity and consent. This training should include at minimum:

- Awareness of child protection issues;
- Awareness of adult patients at increased risk of adverse events due to LBCT;
- The management of patients who inform staff that they wish to LBCT;
- Assessment of capacity and understanding of consent issues;
- Procedures for patients who wish to leave against medical advice;
- The management of patients under common law in the ED/IU setting.

Clinical staff should be involved in audit of LBCT patient cohorts and strategies to optimise the quality of care with regard to patients who LBCT should be addressed through ED/IU-based Quality Improvement initiatives.

10. Analysis and Quality Improvement

Data relating to LBCT events should be collected and analysed to drive quality improvement for patient care. Table 1 outlines some of the criteria that might be included in this analysis. The appropriate frequency of analysis will be determined by the ED Clinical Operational Group on the basis of a risk assessment specific to each ED/IU e.g. how big a problem it is in that ED/IU and what clinical risks are identified. A quality improvement approach should be used to address issues identified through this analysis. This information

should be included in standard safety, quality and risk management reporting by the ED/IU to hospital governance structures.

Patients:	The number of adult patients who: • Register but leave the ED before Triage (Do Not Wait – DNW for Triage); • are triaged but left before assessment by a treating clinician (DNW for assessment); • are assessed by a treating clinician but left the ED/IU against medical advice (AMA); • are assessed by a treating clinician but left without informing staff. The social, demographic and other characteristics of patients who LBCT. Does patient experience data or other feedback provide information to assist in reducing LBCT rates?
Professionals:	Is appropriate training and education in place for staff? How frequently is this updated? Is learning regarding the ongoing management of LBCT rates shared with staff?
Process:	Are safe, efficient processes in place to reduce LBCT rates? Are protocols available to describe the appropriate process of care for patients who express the wish to leave or leave without informing staff?
Patterns:	Assessment of temporal patterns of patients in each of the patient categories to determine if target interventions at specific times might be effective. Assessment of patterns of total ED time data, triage access times or other potential contributory factors at peak times of LBCT rates. Demographic patterns among patients who LBCT Periodic review of cases of patients who left AMA to quality assure AMA care processes and identify patterns in AMA events that may point to areas for improvement

Table 1: A structured approach to analysis of data relating to patients who leave the ED/IU before completion of treatment.

11. Guidance Specific to Paediatric Emergency Care

Child Protection Considerations

Where a child leaves the ED/IU before completion of treatment, a review of the circumstances should be undertaken because of possible child protection risks. If the decision to bring the child from the ED/IU is considered to put the child at risk, then urgent consultation is needed with the senior doctor on duty.

Appendix 1 – References

1. The National Emergency Medicine Programme Report 2012. Accessed 5th July 2012 at http://www.hse.ie/emergencymedicine
2. Health Information and Quality Authority (HIQA) Report of the investigation into the quality, safety and governance of the care provided by the Adelaide and Meath Hospital, Dublin incorporating the National Children's Hospital (AMNCH) for patients who require acute admission, 8th May 2012. Accessed 3rd July 2012 at http://www.hiqa.ie.
3. A&E Clinical Quality Indicators. Implementation Guidance. London; Department of Health, 2010.
4. Clarey AJ, Cooke MW. Patients who leave emergency departments without being seen: literature review and English data analysis. Emerg Med J. 2011;13:617–621.
5. Guttmann A, Schull MJ, Vermeulen MJ, Stukel TA. Association between waiting times and short term mortality and hospital admission after departure from emergency department: population based cohort study from Ontario, Canada. BMJ. 2011 Jun 1;342:d2983. doi: 10.1136/bmj.d2983.
6. Tropea J, Sundararajan V, Gorelik A, Kennedy M, Cameron P, Brand CA Patients who leave without being seen in emergency departments: an analysis of predictive factors and outcomes. Acad Emerg Med. 2012 Apr;19(4):439-47.
7. Giersson OP, Gunnarsdottir OS, Baldursson J, Hrafnkelsson B, Rafnsson V. risk of repeat visits, hospitalisation and death after uncompleted and completed visits to the emergency department: a prospective observational study. Emerg Med J 2013:30:662-668. doi:10.1136/emermed-2012-201129
8. O'Keeffe F, Cronin S, Gilligan P, O'Kelly P, Gleeson A, Houlihan P, Kelada S. Did not wait patient management strategy (DNW PMS) study. Emerg Med J. 2012 Jul;29(7):550-3. doi: 10.1136/emj.2010.109074. Epub 2011 Jun 14. PMID: 21673015. https://emj.bmj.com/content/29/7/550
9. Bindman AB, Grimbach K, Kane D et al. Consequences of queuing for care at a public hospital emergency department. JAMA 1991;226:1091-6.
10. Clinical Practice and the Law. Simon Mills. Second Edition 2007. Tottel Publishing Ltd
11. National Consent Policy, HSE 2019. https://www.hse.ie/eng/about/who/qid/other-quality-improvement-programmes/consent/national-consent-policy-hse-v1-3-june-2019.pdf

Appendix 2 – Left before Completion of Treatment Rate KPI from the National Emergency Medicine Programme Report 2012

Left Before Completion Of Treatment Rate		
Description	Patients who register but leave an ED or other Emergency Care Network (ECN) unit before discharge by a clinician. This includes patients who leave against medical advice and those who leave after registration or triage but before they have been seen by a clinician.	
Aim	To improve patient access to emergency care in EDs and other ECN Units, reduce the clinical risks for patients and the system's resource waste inherent in these events.	
Measures	Percentage of all new ED patients who leave before completion of treatment	
Target	**< 5% of new patient attendances**	
Rationale	a. Patients who leave the ED before being fully assessed, treated and formally discharged by a clinician may experience adverse clinical outcomes. b. More patients are likely to leave without assessment if there are prolonged ED waiting times. This is therefore a measure of patient access to care and a quality of care indicator. c. There is evidence to indicate that patient factors and hospital characteristics influence LBCT rates and that a proportion of these patients need subsequent urgent treatment.[1] d. This measure includes patients who leave against medical advice, between registration and triage or after triage but before a clinician has completed their treatment. e. The right of a competent patient to leave against medical advice (AMA) is recognised, but this patient cohort is included in the measure as high rates of patients leaving against medical advice may point to poor customer service in the ED or other community factors requiring health service intervention. Patient compliance with treatment is a factor in this measure. f. Review of data at departmental level may point to individual patients who habitually attend but do not wait. These patients may need additional health or social care support and all EDs should have processes in place to identify such patients and organise appropriate care for them.	
What this KPI Means for Patients	Many factors may contribute to a patient's decision to leave an ED after initially seeking care, but patients who perceive that they are receiving good quality, timely care are less likely to leave before completion of treatment.	
KPI Collection Frequency	Daily i.e. for 24 hours from midnight	
KPI Reporting Frequency	For 28-day periods commencing on national implementation start date	
KPI Calculation	Numerator	The number of patients who have left an ED or ECN unit before formal discharge by a clinician
	Denominator	All new ED patients and unscheduled return patients
	Inclusion criteria	All new ED patients and unscheduled return patients
	Exclusion criteria	Scheduled return patients
Reporting Aggregation	Hospital, ECN, NECS governance meetings	
Data Sources	Administrative data PAS for unit (some EDs do not currently have PAS systems which record this data – for further work)	
Minimum Data Set	Emergency Care Network Unit Identifier	ID of hospital (to be confirmed or included in EMP dataset)
	Local service-user identifier	

	UHI	Unique Health Identifier (not yet applicable)
	New patient attendance	Data set identifier
	Unscheduled patient attendance	
	Date patient presents	
	Time patient presents	Arrival Time
	Discharge disposition	Confirm in data set – AMA, LBCT
	ID of EM clinician who identifies that the patient has left before completion of treatment or against medical advice	Code for LBCT
International Comparison & Evidence Base	National rates in the US are quoted as 1.7 per 100 visits each year but with marked inter-site variation (0.84% to 15%).[1] A rate of 3.6% is reported for the UK, with a range of 0-22% between EDs. A rate of 5% has been recommended in the UK but this excludes patients who have been seen by a decision maker and leave afterwards.[2] The current UK target that is comparable to Total ED Time is for 95% compliance at 4 hours. The LBCT KPI for Ireland includes patients who leave after being seen by a clinician and a longer TEDT; a target of 5% will be more difficult to achieve. 1. Acad Em Med 2009:16:949-955; Acad Em Med 2006;13:1074-1080. 2. A&E Clinical Quality Indicators. Department of Health 17th December 2010. Available at http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_122868. Accessed 13th January 2011.	
Review date	12 months post implementation start date	
Related KPIs	Total Emergency Department Time	(a) The timeliness of care in the ED reflected in the *Total ED Time* will influence the rate of patients leaving before completion of treatment. (b) Patients who leave before completion of treatment will be included in the population for which *Total ED Time* is measured; it is important to know how many patients left before completion of treatment as the times at which these patients leave may influence the *Total ED Time*.
Action trigger	> 5% new patients LBCT should prompt local investigation	
Additional Measures to be Recorded at Hospital Level	• Proportion of patients leaving against medical advice • Proportion registering but leaving before triage • Proportion leaving between triage and time seen by treating clinican.	

Appendix 3 – Document Information

Document number	LBCT Guidance Jun22
Date issued	8th June 2022
Authors	Emergency Medicine Programme Working Group
Summary	This document is guidance for the management of patients who leave Emergency Departments / Injury Units before being formally discharged by a treating clinician.
Reviewed by	Emergency Medicine Programme Working Group Irish Association for Emergency Medicine Emergency Nursing Interest Group
Contact	emp@rcsi.ie
Applies to	All Emergency Departments
Audience	Acute hospital CEOs/General Managers/Operational Managers, Clinical Directors, Directors of Nursing, Consultants in Emergency Medicine and Emergency Department nursing, clinical and administrative staff; Health Information and Quality Authority, Hospital Legal services.
Approved by	National Emergency Medicine Programme
Document status	DRAFT Guidance
Review date	12 months from date of issue
Contents	Guidance for the Management of Patients who leave Emergency Departments before formal discharge by a treating clinician.
Associated documents	National Consent Policy, HSE 2013 National Emergency Medicine Report 2012 Appendix 19: Access Key Performance Indicators. EMP Protocol for the Management of Unscheduled Patient Returns to Emergency Departments and Injury Units.