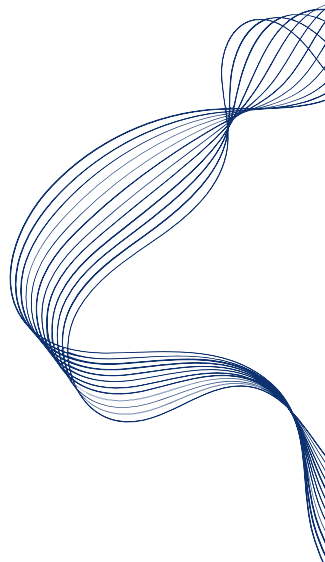


# Ambulance Service Indicators

## Narrative and Overview

### October 2023



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# NARRATIVE AND OVERVIEW

The Welsh Ambulance Services NHS Trust (WAST) delivers emergency ambulance services for the population of Wales and anyone visiting Wales.

The seven Local Health Boards through the Emergency Ambulance Service Committee (EASC) commission these services. To monitor these services EASC developed with WAST a set of Ambulance Service Indicators (ASI) which are reported on the second to last Thursday of the month across the Five Step Ambulance Care Pathway (5-step model).

The 5-step model is designed to ensure that ambulance service resources are dispatched to calls where there is an immediate need to save life or provide treatment. For other less serious cases, alternative treatments such as referrals to other parts of the NHS or telephone advice will be provided.

The 5-step model is intended to ensure the ambulance service is providing the right response for a patient dependent on their clinical need.

This ASI release focus on the period: **October 2023**. The Ambulance Service Indicators (formerly Ambulance Quality Indicators) have been produced since October 2015, to export a full copy of the Wales-level dataset or Local Health Board dataset please visit the Emergency Ambulance Services Committee [Website](#). Metadata is also available as is a full list of indicator descriptors.

WAST also provide the NHS 111 Wales service across Wales with a website providing patients with access to health information including symptom checkers, service and defibrillator locations.

NHS 111 Wales also provides a 24/7 telephone advice service which patients can ring if they are unsure as to their healthcare need.

WAST provides a range of services which are coordinated through Clinical Contact Centres which, receive calls for help from the public and health care professionals who need to access emergency assistance for a patient.



Figure 1 - Five Step Ambulance Care Pathway



# CLINICAL RESPONSE MODEL

The aim of the clinical response model is to ensure that patients receive the right clinical care at the right time and allows WAST to quickly identify the clinical need of a 999 caller.

This allows the correct response to be provided, this may be an ambulance or a paramedic in a rapid response car for RED or serious AMBER calls. For many lower priority AMBER and GREEN incidents, advice may be provided for the caller over the telephone by a nurse or paramedic.

Category	Description
RED	Immediately life-threatening calls such as cardiac arrest or choking. These calls will be subject to both clinical indicators such as Return of Spontaneous Circulation (ROSC) rates and a time-based standard requiring a minimum attendance at 65% of these calls within 8 minutes.
AMBER	Serious but not immediately life threatening. These calls will include most medical and trauma cases such as chest pain and fractures. Amber calls will receive an emergency response. A response profile has been created to ensure that the most suitable clinical resource is dispatched to each amber call. This will include management via “hear & treat” services over the telephone. Patient experience and clinical indicator data will be used to evaluate the effectiveness of the ambulance response to amber calls.
GREEN	999 calls received and categorised as green are neither serious or life threatening. Conditions such as earache or minor injuries are coded as green calls. Green calls are ideally suited to management via secondary telephone triage.
GREEN HCP	Health Care Professionals (HCP) such as doctors, midwives or community hospitals often require an urgent transfer of a patient from low acuity care to a higher acuity facility. These transfers are coded as green calls and undertaken within a timeframe agreed with the requesting HCP.

Table 1 - Clinical Response Model



# FIVE STEP AMBULANCE CARE PATHWAY

## STEP 1 - HELP ME CHOOSE

In this reporting period, October 2023, there were **454,736** visits to the NHS 111 Wales website (AQI4i).

*Note: Measuring the number of visits to the NHS 111 Wales website helps identify periods of high demand and examine links to call volumes to both NHS 111 Wales and the Emergency Clinical Contact Centres.*

Dental problems are the top reason for the public calling NHS 111 Wales / NHS Direct Wales totaling **3,104** calls (AQI4ii).

*Note: Identifying the top 10 reasons for calling NHS Direct Wales helps identify the topics for advice that NHS Direct Wales needs to be able to provide. It also allows Local Health Boards to develop services where there is an unmet need.*

Frequent callers are defined as people who dial an emergency service more than five times in a month or 12 times in three months.

**243** frequent callers generated **2,538** incidents over the reporting period, this equated to **7.3%** of the total WAST incidents (**34,799**) (AQI5).

*Note: Identifying frequent callers helps WAST manage the needs of this group of callers, many of whom are vulnerable adults who have an unmet need. Simply sending ambulances to these patients does not necessarily mean they get the help they need. Frequent caller patient needs are managed via multi-disciplinary teams including primary, secondary care and clinical managers in the Local Health Boards and WAST. This may involve WAST referring a patient to a GP service or a specialist team such as a mental health service.*



## STEP 2 - ANSWER MY CALL

### HEALTH CARE PROFESSIONAL CALLS

There were **4,219** calls for an urgent (1-4 hour) admission from health care professionals over the reporting period (AQI6).

Note: A health care professional is defined as a Doctor usually a General Practitioner, Paramedic, Nurse, Midwife, Dentist or Approved Social Worker. Measuring the number of calls from healthcare professionals helps WAST plan and develop strategies to manage the needs of these patients.

### 999 CALLS

**45,366** 999 calls were answered (AQI7i) with **34,799** calls taken through the Medical Priority Dispatch System (MPDS) (AQI8). The top 10 calls are shown below:

Protocol	Description	Number of incidents
06	Breathing Problems	4,351
17	Falls	4,163
10	Chest Pains	3,789
26	Sick Person (Specific Diagnosis)	2,671
31	Unconscious / Fainting (Near)	1,887
UGA1	Upgrade to AMBER 1	2,111
U	Unknown - User Left Call	1,347
21	Haemorrhage / Lacerations	1,351
28	Stroke (CVA/TIA)	1,308
12	Convulsions / Fitting	1,330

Table 2 - Top 10 call protocols taken through MPDS

Note: MPDS is a system that WAST use to assess the severity of 999 calls.



## HEAR AND TREAT

**4,984 (14.3%)** calls were ended following WAST telephone assessment; 'Hear and Treat' (AQI9i).

Note: 'Hear and Treat' is the telephone clinical advice that callers who do not have serious or life-threatening conditions receive from WAST. This may mean an ambulance response will not necessarily be sent immediately. Instead, patients may be given more appropriate healthcare advice based on what they tell the clinician over the phone. They may receive advice on how to care for themselves or where they might go to receive appropriate assistance, for example a GP or a Pharmacy. They may also be advised to make their own way to hospital where this is safe or be provided with alternative transport rather than an ambulance.

Note: Re-contact rates measure the number of patients who dial 999 after receiving telephone advice ('hear and treat') services or after being treated at the scene ('see and treat'); this may be for an unexpected or new problem within the following 24 hours. To ensure WAST is providing safe and effective care, first time, this indicator measures how many patients call WAST back within 24 hours of the initial call being made.

Of the **4,984** calls ended following 'hear and treat' (AQI9i) there were **480** re-contacts within 24 hours (AQI10i).

## SEE AND TREAT

Of the **2,222** treated at scene ('see and treat') (AQI10ii), there were **19** (AQI10ii) re-contacts within 24 hours.



STEP 3 - COME TO SEE ME

RED RESPONSE CATEGORY

There were **4,828** RED calls over the reporting period (AQ111).

The Wales national target for a response arriving to RED calls in 8 minutes is 65%. At an all-Wales level, this target was not met for this month.



Table 3 – Monthly National RED Percentage Response Target

The target for each Health Board area is 60% and this target was not met for this month.

Local Health Board	October 2023
Aneurin Bevan LHB	50.2%
Betsi Cadwaladr UHB	48.5%
Cardiff and Vale UHB	52.9%
Cwm Taf Morgannwg UHB	39.8%
Hywel Dda UHB	44.0%
Powys tHB	46.9%
Swansea Bay UHB	45.2%

Table 4 – Monthly Local Health Board Percentage Response Target



RED RESPONSE CATEGORY

RED calls are immediately life threatening, so it is important to measure not just how WAST performs against the Wales national target, but the distribution of performance.

Category	October 2023
RED Median	00:08:26
RED 65th Percentile	00:10:58
RED 95th Percentile	00:23:35

Table 5 – Monthly RED Response Time (HH:MM:SS)

AMBER RESPONSE CATEGORY

There was **15,618** AMBER over the reporting period. AMBER calls are serious, but not immediately life threatening and are measured by the standard of care provided by WAST (AQI12).

Category	October 2023
AMBER Median	01:29:13
AMBER 65th Percentile	02:18:12
AMBER 95th Percentile	08:01:30

Table 6 – Monthly AMBER Response Time (HH:MM:SS)



GREEN RESPONSE CATEGORY

There were **1,364** GREEN calls over the reporting period. GREEN calls are 999 calls received that are considered neither serious nor life threatening (AQI13).

Category	October 2023
GREEN Median	01:18:57
GREEN 65th Percentile	02:06:04
GREEN 95th Percentile	11:30:23

Table 7 – Monthly GREEN Response Time (HH:MM:SS)

RESOURCE ARRIVAL

**Note:** It is important to make the best use of available ambulance resources and to measure the number of resources that are allocated to an incident. There are occasions when it is appropriate for more than one ambulance to be allocated, for example, a multiple response to a very serious call where there is an immediate threat to life (categorised as RED) or multi-casualty incidents such as road traffic collisions.

Over the reporting period, 1 resource arrived on scene to **71.2%** of incidents, 2 resources to **22.6%** of incidents, 3 resources to **4.9%** of incidents and 4 or more resources to **1.3%** of incidents (AQI14).

COMMUNITY RESPONSE

Community First Responders are volunteers trained by WAST who are sent to certain incidents to provide immediate care before the arrival of an ambulance. These volunteers are vital to saving lives across Wales.

Community First Responders attended **894** incidents over the reporting period and were first on scene in **776 (86.8%)** of these incidents (AQI15).



## STEP 4 - GIVE ME TREATMENT

Treatment given by ambulance clinicians before a patient reaches hospital is a major factor in their chances of survival and recovery. Ambulance clinicians use packages of care, assessment and treatment known as care bundles. Care bundles are a series of assessments, treatments and actions that are clinically recognised to improve a patient's outcome and experience.

This information is gained from clinical patient records completed by staff using their digital pens. In this release, we have highlighted the performance against seven key clinical indicators for cardiac arrests, strokes, heart attacks (called STEMI), fractured hips (known as neck of femur injuries), febrile convulsion and sepsis.

Publication Note: WAST introduced a new Electronic Patient Clinical Record (ePCR) System across the service in December 2021.

As the data collection process has changed, the EASC advised that publication clinical indicator reporting was paused from December 2021 to March 2022. Clinical indicators will be brought online as they are checked and validated. Below are those included in this month's publication.

ROSC: return of spontaneous circulation is the resumption of sustained perfusing cardiac activity associated with significant respiratory effort after cardiac arrest. Of the **293** patients who had resuscitation attempted following a cardiac arrest, **17.1%** of patients were documented as ROSC at the hospital door.

Stroke: a stroke happens when the supply of blood to the brain is suddenly interrupted. This indicator measures the number and percentage of suspected stroke patients assessed face to face who received all the elements of the stroke care bundle. The measures include a F.A.S.T (Face Arm Speech Test) assessment, the recording of blood glucose and blood pressure readings. **76.4%** of patients were documented as receiving the appropriate stroke care bundle (AQI16ii).

Fractured hip: (known as neck of femur injuries): fractured hips cause significant pain, which can be exacerbated by movement. Pain control for patients with a fractured neck of femur in the immediate post-trauma period is paramount to promoting recovery and patient experience. This reduces suffering and the detrimental effects uncontrolled pain may have, **71.1%** were documented as receiving the appropriate care bundle (including analgesia) (AQI16iii).

STEMI patients: there were **86** STEMI patients, of these **46 (53.5%)** received the appropriate care bundle. (AQI16iv). Hypoglycemic patients: there were **236** hypoglycemic patients, of these **112 (47.5%)** received the appropriate care bundle. (AQI16vii).

Over the reporting period, **3,862** incidents did not result in a conveyance to a hospital or another destination. The reason for non-conveyance is that **2,203** of these incidents were treated at scene and **1,659** were referred to an alternative provider (AQI17).



## STEP 5 - TAKE ME TO HOSPITAL

**14,164** patients who called 999 were conveyed to a hospital or another destination over the reporting period (AQI19i).

NHS Wales guidance is that the handover of care of patients from an ambulance crew to hospital staff should be within 15 minutes. Across Wales, this occurred in **21.0%** of cases (AQI20i).

Note: The handover of care is important as taking more than 15 minutes means the patient remains in the ambulance, which means the ambulance is not available to respond to other calls in the community.

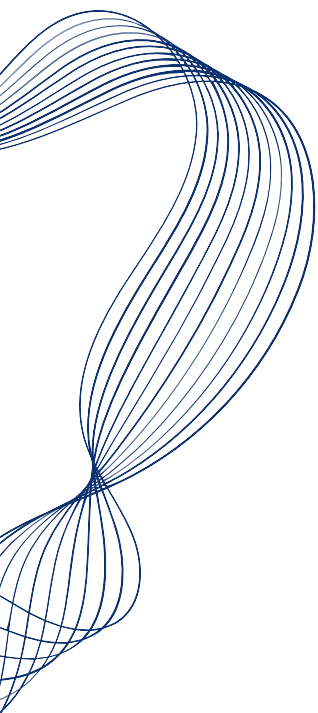
Over the reporting period, **23,229** hours were lost to delayed handovers of care (AQI21).

Note: Once an ambulance crew has handed over the care of a patient to a hospital or other destination NHS Wales guidance is that ambulances clear and be ready for the next call within 15 minutes or less.

Over the reporting period, **83.0%** of ambulances cleared within 15 minutes or less (AQI22i).

The handover to clear is an important efficiency measure, this quarter's data shows **409** hours were lost to delayed handovers to clear (AQI24).





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