

Understanding Emergency Care in NHSScotland

When do patients attend Emergency Departments?

Year ending March 2016.

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Introduction

This publication from the Information Services Division reports on attendances at Emergency Departments in Scotland. These are larger A&E services that typically provide a 24-hour consultant led service. There were 1.31 million attendances that took place at the 30 Emergency Departments in Scotland in the year ending 31 March 2016.

This release focuses on when patients arrive at Emergency Departments and looks at the seasonal, weekly and daily patterns of these attendances.

Emergency Care Services

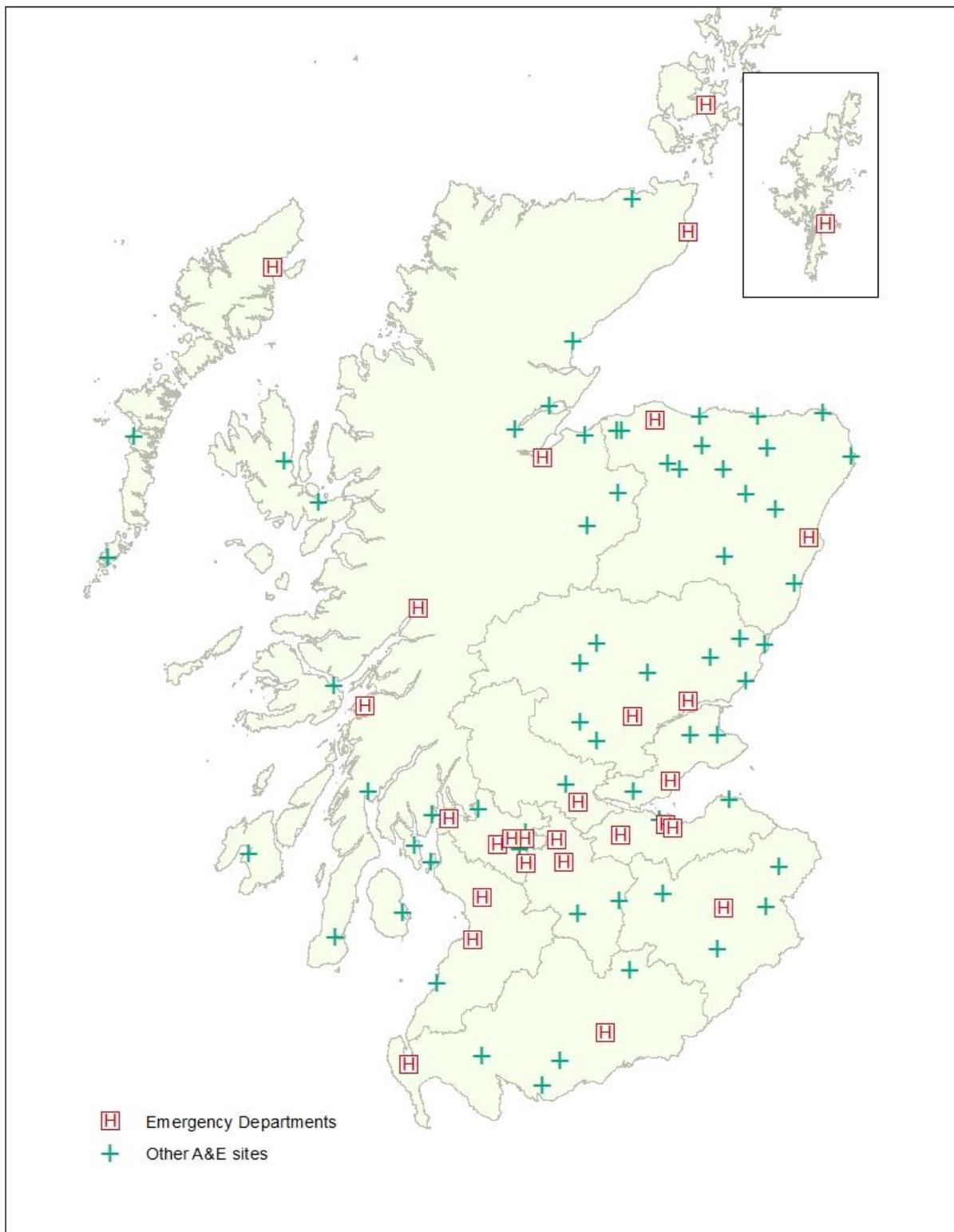
Annually there are around 1.6 million attendances to all A&E services in Scotland. Emergency Departments are responsible for more than 8 out of every 10 attendances, and 19 out of 20 admissions to hospital from A&E.

There are a total of 93 locations providing A&E services across Scotland. Of these, 30 are Emergency Departments. As well as the 30 Emergency Departments there are also minor injuries units, community hospitals and health centres all of which carry out Accident and Emergency related activity, and are often GP or nurse led.

Referrals to Emergency Care

There are a number of different ways a patient can be referred to an Emergency Department in NHSScotland. They may be referred by a healthcare professional such as a GP, through a call to NHS 24 or via a 999 emergency call. A patient may also 'self refer', making a personal decision to attend the Emergency Department. Self referral includes patients brought in by a family member or bystander. This reports looks into the patterns of arrival time at Emergency Department for patients by referral source.

Locations of all A&E services in Scotland

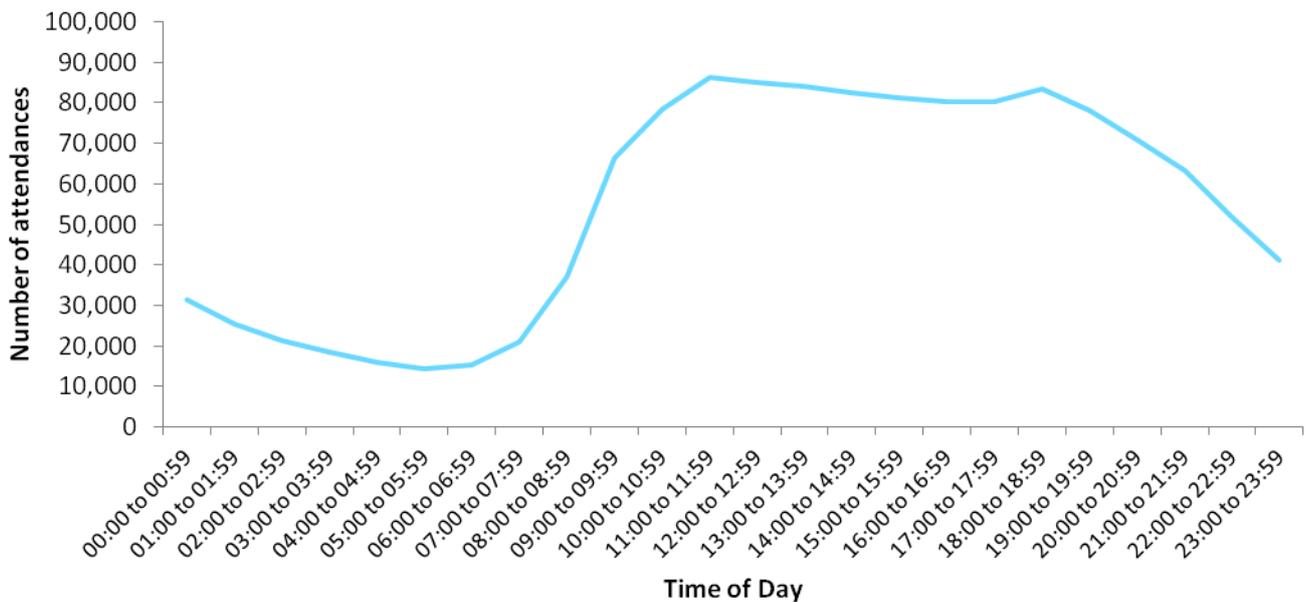


Attendances at Emergency Departments by time of day

Arrivals at Emergency Departments vary considerably throughout the day. Patients were less likely to arrive during the night, but numbers climbed sharply from 7am onwards reaching a peak between 11am and midday. The number of patients arriving remained high before reaching a second slightly smaller peak between 6pm and 7pm then gradually decreasing through the night.

The age profile of patients arriving at Emergency Departments differs depending on the time of day. The late morning peak in attendances was largely due to patients aged 26 and over. Children and young adults were more likely to attend in the early evening.

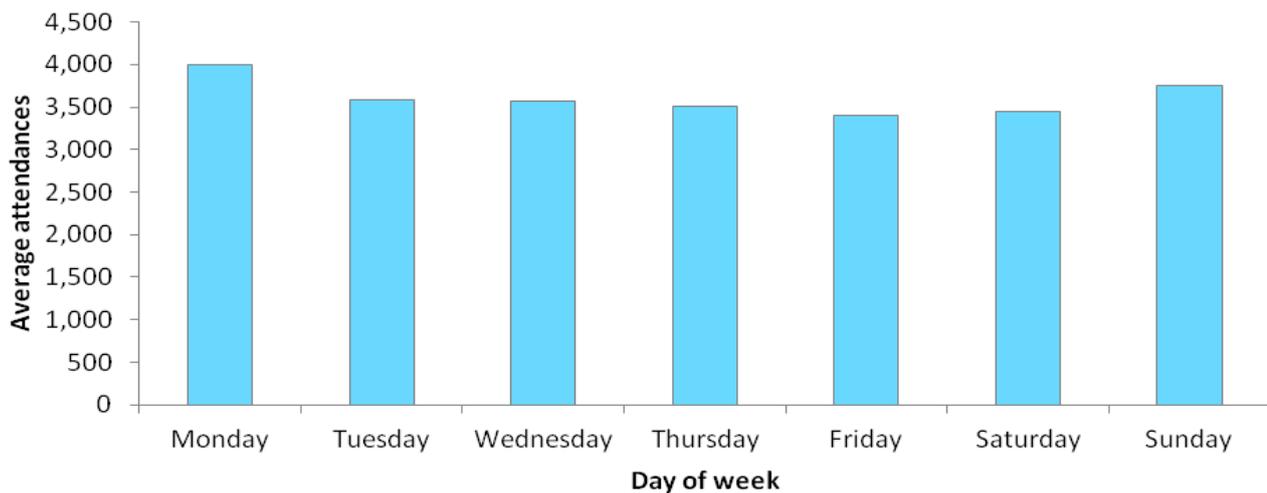
Patients arriving at Emergency Departments peaked at 11am and remain high until 7pm



Day of attendance

The number of patients attending Emergency Departments varies according to the day of the week. Mondays had the highest number of attendances, with around 4,000 on average, followed by Sunday (3,800). Fridays had the lowest number of attendance at Emergency Departments - around 3,400 on average which is 600 fewer than on Mondays.

Mondays and Sundays had the highest number of attendances at Emergency Departments



The variation in attendance was more marked in young adults (17-25 year olds). For this group, Sunday was the day with the most attendances, when the number of attendances is a third higher than on Fridays, which had the fewest attendance.

For patients aged 65 and over the daily attendance profile was less varied, and Monday was the day with the most attendances.

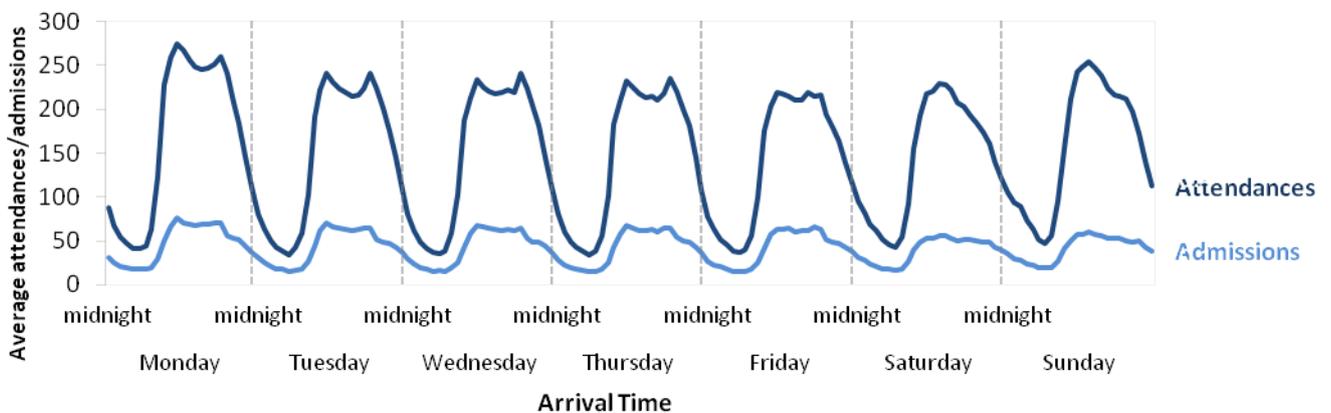
Day and time of attendance

The pattern of attendance at Emergency Departments throughout out the day was different during the week than at weekends. Monday to Friday displayed two peak times of patients arriving, one between 11am and midday and the other between 6pm and 7pm, with a sustained level of patients arriving between these times. The late morning peak was largely due to patients age over 25 and the early evening peak was largely due to patients aged 25 and under. By contrast, on weekend days, there was only one peak in patients arriving, between 1pm and 2pm.

Patients who were admitted to hospital following an attendance at an Emergency Department also displayed a different profile between weekdays and the weekend. On average, 1,000 (28%) of the 3,600 patients who attended Emergency Departments each day were subsequently admitted to hospital. Saturdays and Sundays showed lower average daily admissions from an Emergency Department which were also less variable from hour to hour throughout the day.

Patients were more likely to be admitted to hospital if they attended an Emergency Department between midnight and 7am. The proportion admitted is highest (42%) for patients attending Emergency Departments between 5 and 6am. Sunday had the lowest proportion of admissions through the week – 26% of patients attending an Emergency Department on a Sunday were admitted compared to 30% of patients attending on a Friday.

Sunday was the second busiest day for patients attending Emergency Departments but patients were less likely to be admitted to hospital following their attendance

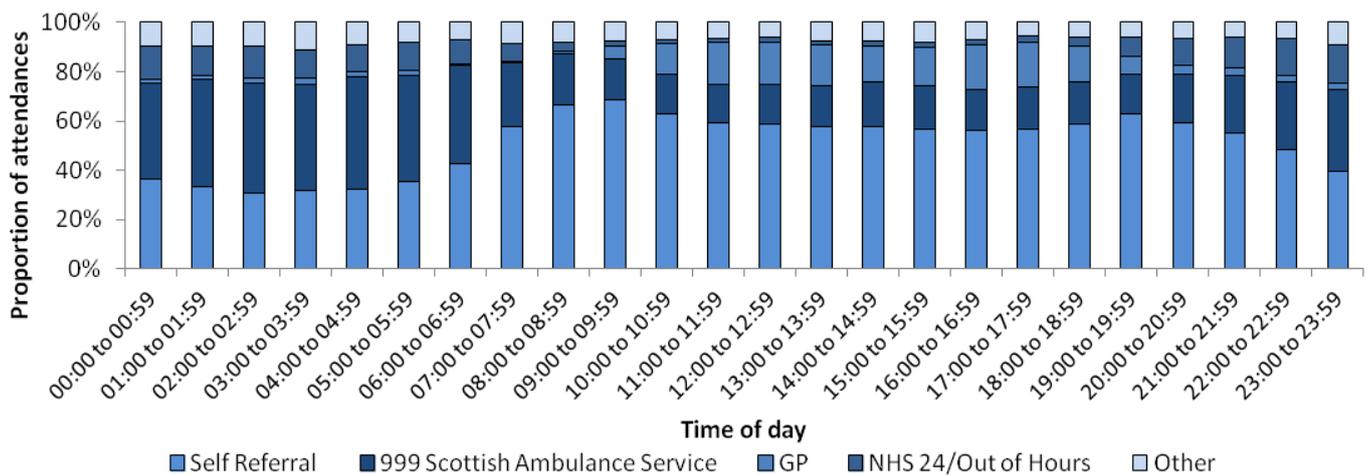


Referrals by day and time

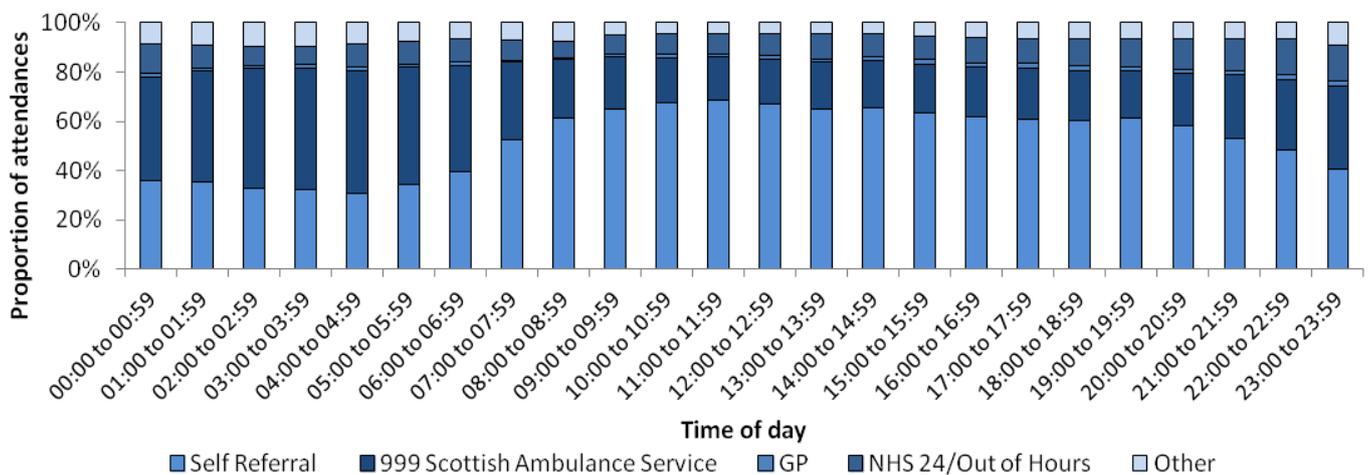
The way in which patients were referred to the Emergency Department varies depending on the time and day of the week.

Throughout the week, most patients (55%) attending Emergency Departments, did so of their own accord. Between 9am and 7pm on weekdays, around 14% of patients attending Emergency Departments were referred by their GP, reflecting GP opening hours. Outwith GP opening hours, a higher proportion of patients were referred by the out of hours service or NHS 24. Referrals by 999 Scottish Ambulance Service made up the biggest proportion of patient referrals through the night, from midnight to 6am. On Saturday and Sunday mornings between 5 and 6am, 50% of patients arriving at the Emergency Department were referred by 999 Scottish Ambulance Service.

Monday



Sunday

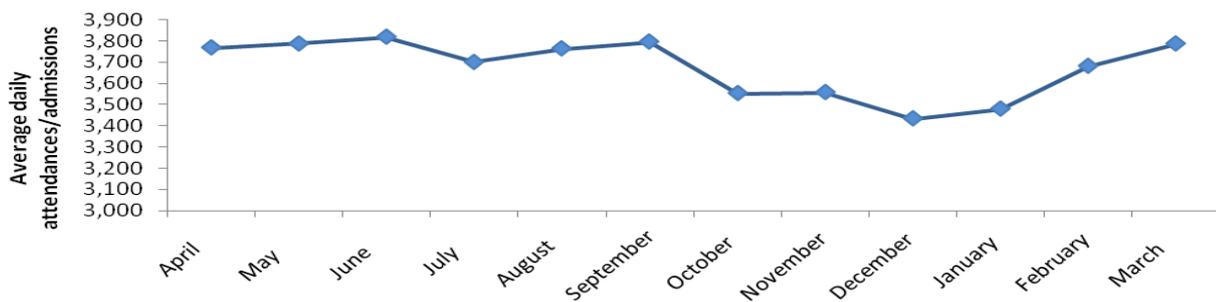


Attendance: variation by month

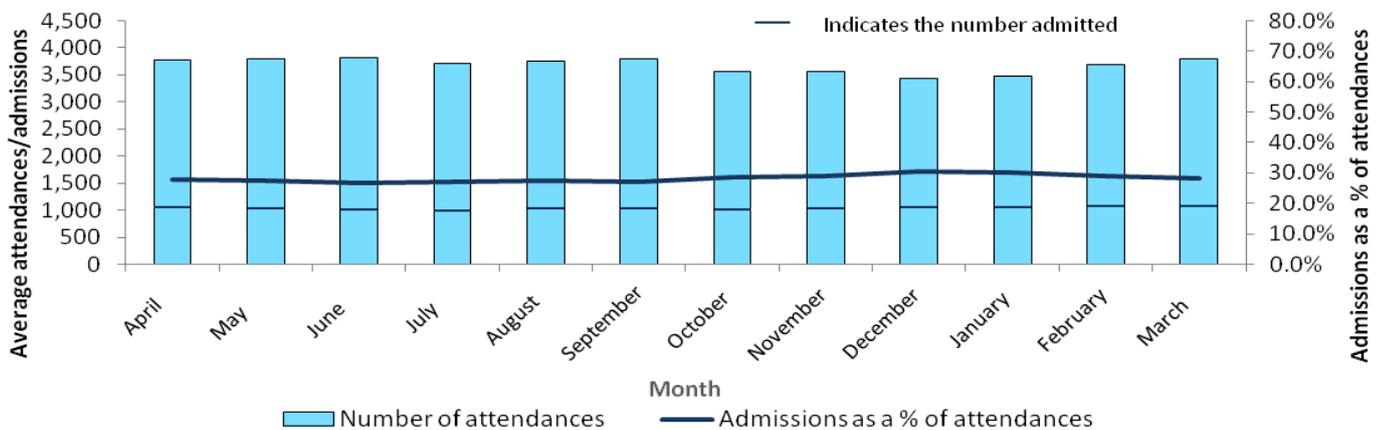
Attendances at Emergency Departments displayed a slight seasonal pattern with attendances being higher in summer compared to winter. Over the last three years, June had the highest number of average daily attendances (3,817) with December having the lowest (3,433). One factor for the increase in attendances during summer could be better weather encouraging outdoor pursuits and resulting in an increase in the number of injuries presenting at Emergency Departments.

The average daily number of patients admitted to the same hospital after attending an Emergency Department remained fairly constant through the months of the year, resulting in the proportion of attendances that are admitted being slightly higher in winter.

More people attended Emergency Departments during summer



Admission to hospital following attendance at an Emergency Department remained consistent throughout the year



Emergency Department data

Data on A&E service attendances across Scotland are collected on local hospital systems, then extracted and submitted to the Information Services Division of NHS National Services Scotland.

The referral 'source' is recorded at reception. Information may be taken from the GP letter of referral, as part of the handover of a patient's care by Scottish Ambulance Service crew or as indicated by the patient or person accompanying them.

The source of referral is derived from the referral source field within the A&E datamart, the exception to this is when the arrival mode is "ambulance", and the referral source is 'self referral'. These attendances have been coded as referral source "999 Emergency Services", to improve the consistency of this analysis.

This report only includes first / unplanned attendances, it excludes those patients that are recalled or have been planned to return.

Glossary

Emergency Department	A larger A&E service that typically provides a 24-hour consultant led service.
Accident & Emergency (A&E) Services	Collectively the term Accident and Emergency (A&E) Services includes the following site types: Emergency Departments; Minor Injury Units, community A&Es or community casualty departments that are GP or nurse led.
Attendance	The presence of a patient in an A&E service seeking medical attention.
Admission	Admission to a hospital bed in the same NHS hospital following an attendance at an ED service.

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Further Information

The tables and charts included in this report are supplied in an Excel Workbook: [2016-05-24-EmergencyCare-WhenDoPatientsAttend.xlsx](#) . Analyses are available as interactive tables and charts allowing the user to view information for individual NHS Boards and hospitals.

Further information on Emergency Department Activity can be found on the [Emergency Department Activity](#) pages of the ISD website. A [metadata document](#) has been produced for this publication.

[A list of Accident and Emergency sites](#) is also available online.

This edition is latest in a series of quarterly publications focussing on different aspects of emergency care. The analysis included in this release was developed following consultation with our users, including; the public, users of ISD statistics across NHSScotland and the Scottish Government.

Future editions of this publication will include analysis of seasonal, daily and weekly patterns of attendance and analysis of longer term trends. If there is any other analysis that you would like to see in future release of this series, please send your suggestions to: nss.isdunscheduledcare@nhs.net

Feedback

If you would like to provide feedback on this publication, you can '[rate this publication](#)' online and help us improve our outputs.