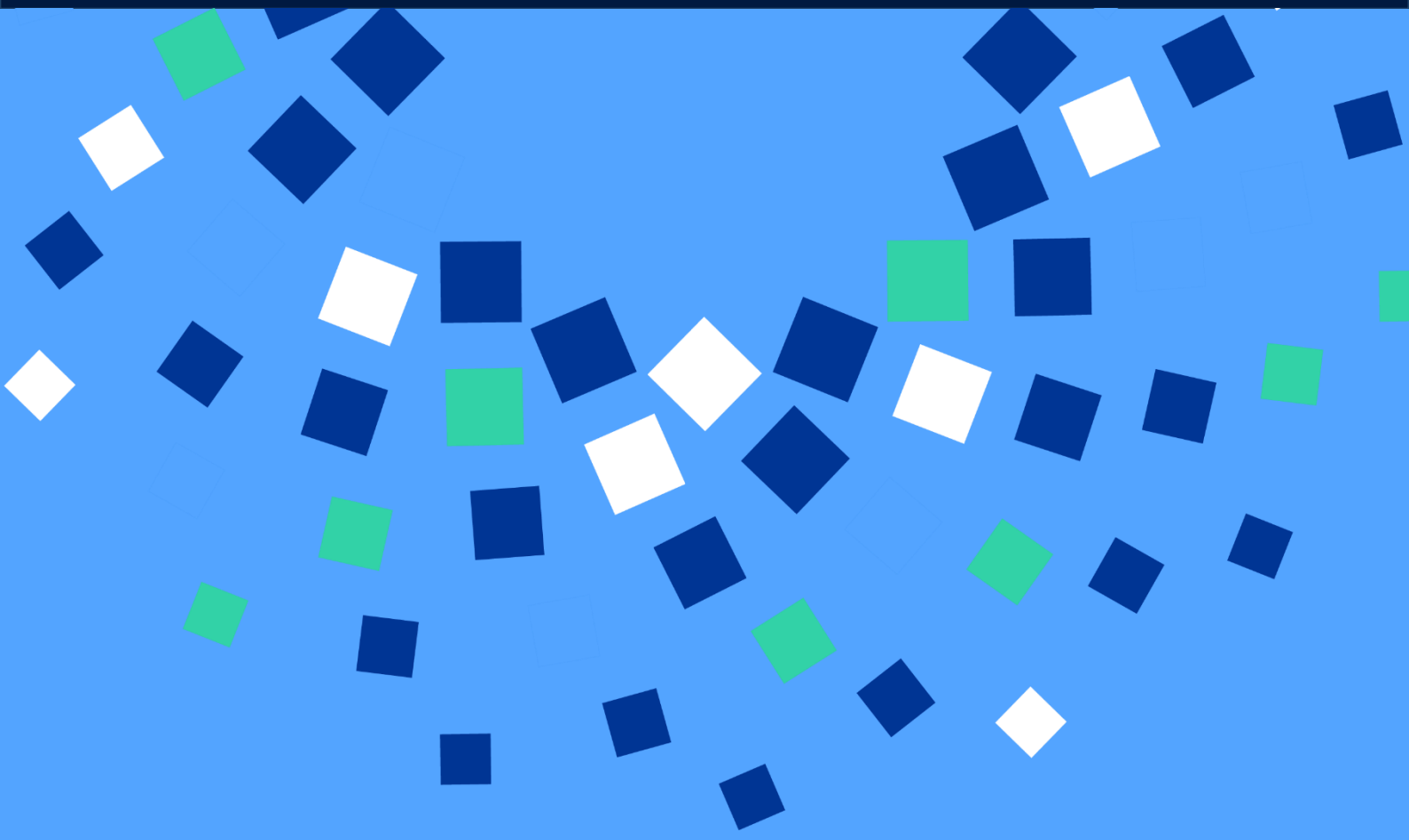
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Data Explained

# Outpatient Referral Dataset (OPRD)

**Authors:** Victoria Best, Sarah Aldridge, Roberta Chiovoloni, Ashley Akbari
**Date:** October 2026

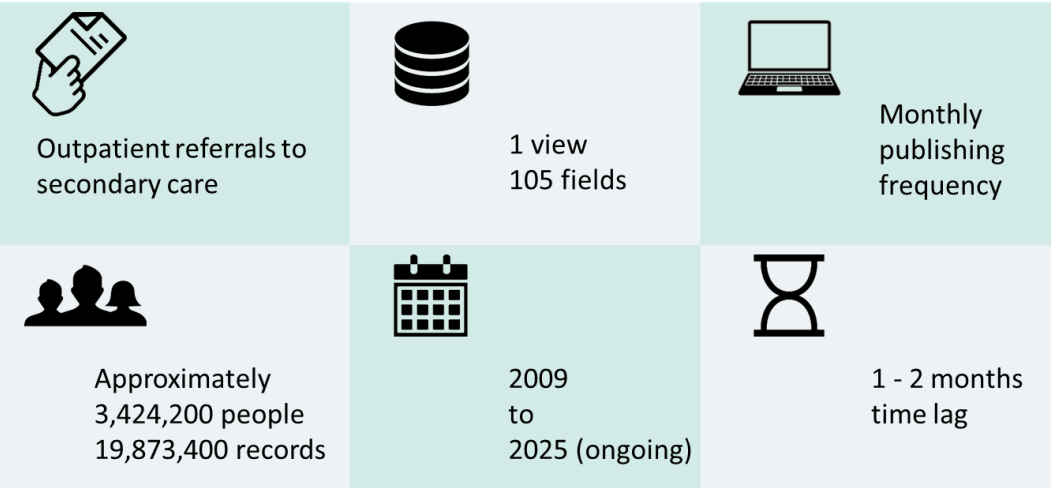


## Summary

**This Data Explained summarises experiences and learning from working with the Outpatients Referral Data (OPRD). This publication is intended to help guide future researchers using this data and to provide feedback on future data development and documentation.**

**The administrative data discussed in this Data Explained was made securely available through an approved SAIL project via the independent Information Governance Review Panel (IGRP) – project 1934. The data used in this research project comes from Digital Health and Care Wales (DHCW) and was accessed through the Secure Anonymised Information Linkage (SAIL) Databank. The data were not originally collected for research, and gaps and inconsistencies in their recording are expected; some are detailed below.**

## Overview




## Introduction

The Outpatient Referral data source (OPRD) publishes patient-level referrals to secondary care on a monthly basis. A referral at the individual patient level is a request to transfer responsibility for a particular aspect of the patient's clinical care. The time between the request and acceptance of clinical care is considered the waiting time (Data Standards, HSW, 2008).

Outpatient referral data is currently captured in the Planned Care Referral (PCR) data. The PCR was implemented in October 2024 in response to a change in scope from the previous Outpatient Referrals data set (OPR ds), which had been in place since 2008 (Data Standards, HSW, 2008). The OPR ds was the former source for OPRD data and was originally designed to assist the Welsh Assembly Government in providing high-quality data on primary and secondary care demand and capacity (Corporate Health Information Programme, 2010). The PCR was subsequently developed to provide a modernised dataset as part of a wider three-year strategy to transform outpatient services in Wales (Welsh Government, 2023). The SAIL OPRD data is currently populated from the PCR, while maintaining the same fields and format as when it was sourced from the OPR ds.

The OPRD contains information on referrals to outpatient secondary care from General Practitioners, Dentists, Accident and Emergency departments, and self-referrals, as well as consultant-to-consultant referrals. Referrals of Welsh patients to English Trusts are outside the scope of the OPR ds (Data Standards, HSW, 2008), although a small number of referrals to English trusts do exist within the OPRD data, particularly prior to 2012.

The PCR currently captures referrals to mental health and maternity services; however, as part of the wider strategy to transform outpatient services, these are anticipated to be removed in the future and captured in newly derived datasets (Welsh Information Standards Board, 2024).

OPRD coverage began in April 2009 and was still active at the time this report was produced in 2026.

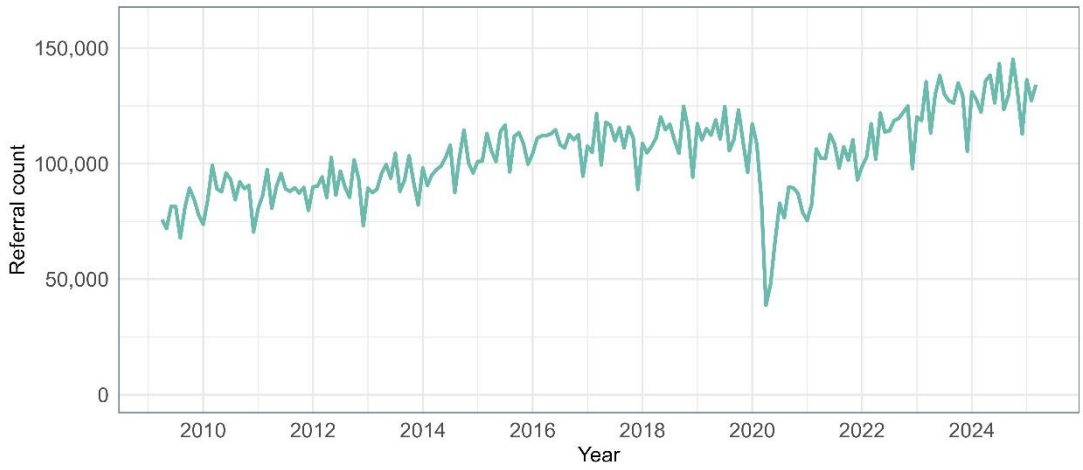



***Figure 1 - Count of all OPRD clinical referrals per month.***

# How is the data collected?

The seven Welsh Health Boards (HBs) and Velindre NHS Trust compile outpatient information which has occurred at their sites. This is then submitted in a fixed-format file via the NHS Wales Data Switching Service (NWDSS) on a monthly basis, in line with the PCR requirements. A check can be conducted prior to submission using the Validation at Source Service (VASS), which enables HBs/Trusts to validate and correct their data before submission, thereby improving data quality (NHS Wales, n.d.-c). English organisations should also submit data on patients registered with Welsh General Practices. Digital Health and Care Wales (DHCW) are responsible for collating the individual returns into a single resource.

A timeline of key events for the OPRD is provided below. This list is not exhaustive but aims to cover the most significant changes relevant for data users.

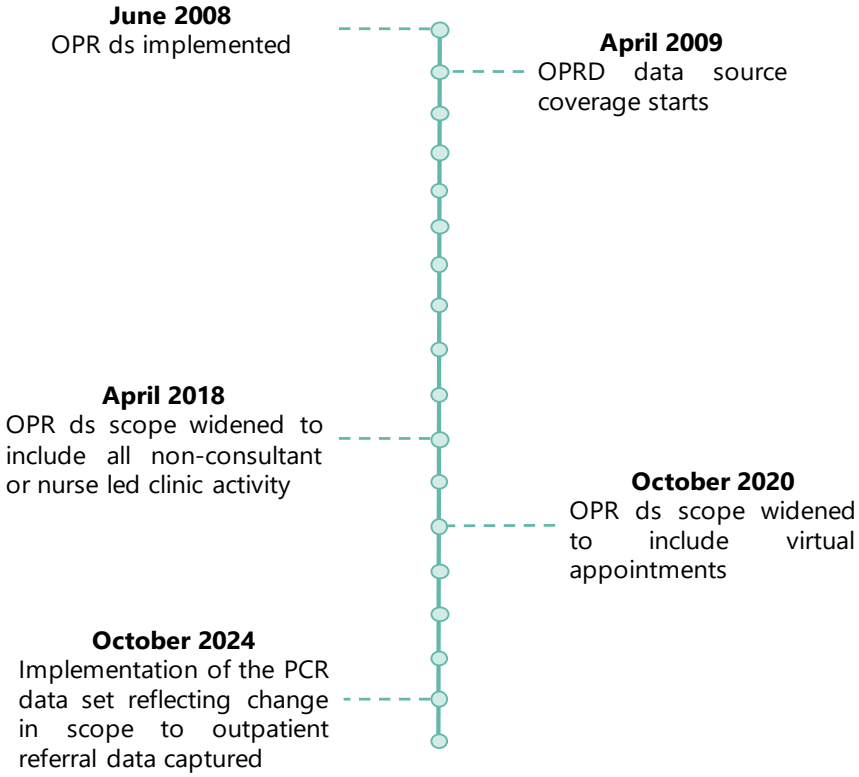



***Figure 2 - Timeline of key events impacting the contents of the OPRD.***

# Data structure and linkage

OPRD is provided within SAIL as a single, individual-level table, with each record representing referrals. The data includes a unique Anonymised Linkage Field (ALF) for each individual, enabling robust linkage to other data sources in the SAIL Databank. The OPRD consists of one table with 109 columns, but 12 of them contain no data. OPRD and the Outpatient Database for Wales (OPDW) cannot be definitively linked, although estimates can be made using fields such as *ALF_PE* and *REF_DT*. OPRD and OPDW do not contain directly comparable data; multiple attendances in OPDW may relate to a single referral in OPRD, and referrals in OPRD may not result in an OPDW attendance.

# Key variables

A large number of the fields within the OPRD are duplicated in some way (see Data Limitations Encountered). Some key information available from the OPRD is listed below.

| *Field name* | **Description** |
|---|---|
| *ALF_PE* | Anonymised linkage field (person ID) |
| *REF_DT* | Date the patient was notified of the referral or the date the referral was sent. Note: not to be used to calculate official waiting times |
| *CLIN_REF_DT* | Date that the referral was received by the hospital or receiving organisation. Note: not to be used to calculate official waiting times |
| *TREAT_SPEC_CD*<br>*TREAT_SPEC_DESC* | Treatment Function Code / Description. This is the speciality under which the patient will be, or is, treated. |
| *REF_ORG_NAME* | Referring Organisation Name. The name of the organisation of the General Medical Practitioner (GMP), General Dental Practitioner (GDP) and Consultant or Independent Nurse making the referral. |
| *SOURCE_OF_REF_DERIVED_CD*<br>*SOURCE_OF_REF_DERIVED_DESC* | Derived Source of Referral Code / Description. This classification identifies the source of referral for each Outpatient Episode or Outpatient Referral. |
| *REASON_FOR_REF* | The reason(s) for the patient requiring involvement with care professionals. These may include any problem, issue or event affecting the patient. However, multiple coding systems are recorded in this field, which complicates analysis. In many cases, the recorded codes could not be matched to the most commonly used diagnostic coding systems in Wales (International Statistical Classification of Diseases Version 10 (ICD-10), Read code, or SNOMED). |
| *SERVICE_TYPE_REQST_CD* | Service Type Requested Code. Identifies, at a high level, whether the referral requests advice, investigation, or treatment. The categories changed in October 2024, so researchers should ensure they refer to the appropriate lookup tables for the time period. |
| *REF_PRIORITY_TYPE_CD* | Indicates the referral priority as determined by the referrer, with values of 1 indicating 'routine' and 2 indicating 'urgent'. From 2024, an additional category (3) for suspected cancer was added, but no such entries had been recorded at the time of writing. |

***Table 1 - Key variables in OPRD***

The most frequently recorded referral sources are provided below for information, but the actual referral sources of interest will depend on the project.

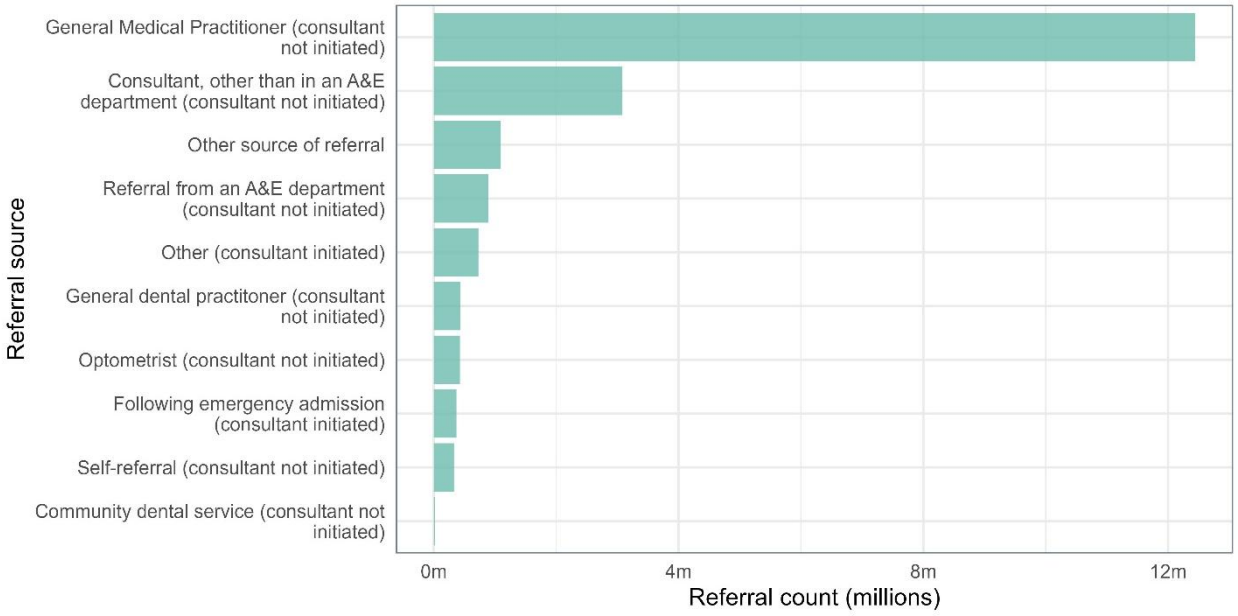



***Figure 3 - Count of OPRD clinical referral counts by referral source.***

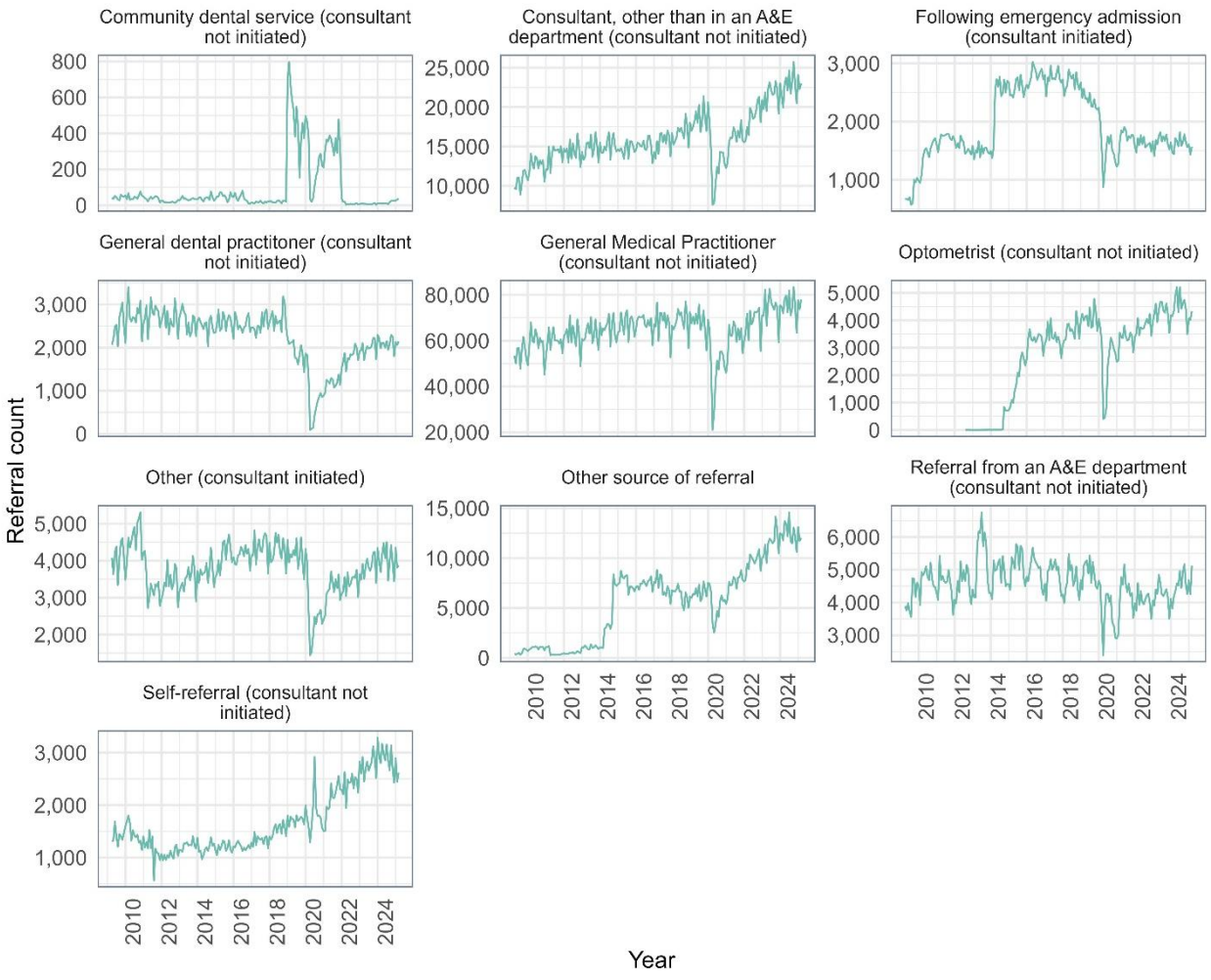



***Figure 4 - Count of OPRD clinical referrals per month by referral source.***

Figure 5 below shows the most frequently recorded treatment functions for reference, but the treatment functions of interest will depend on the project.

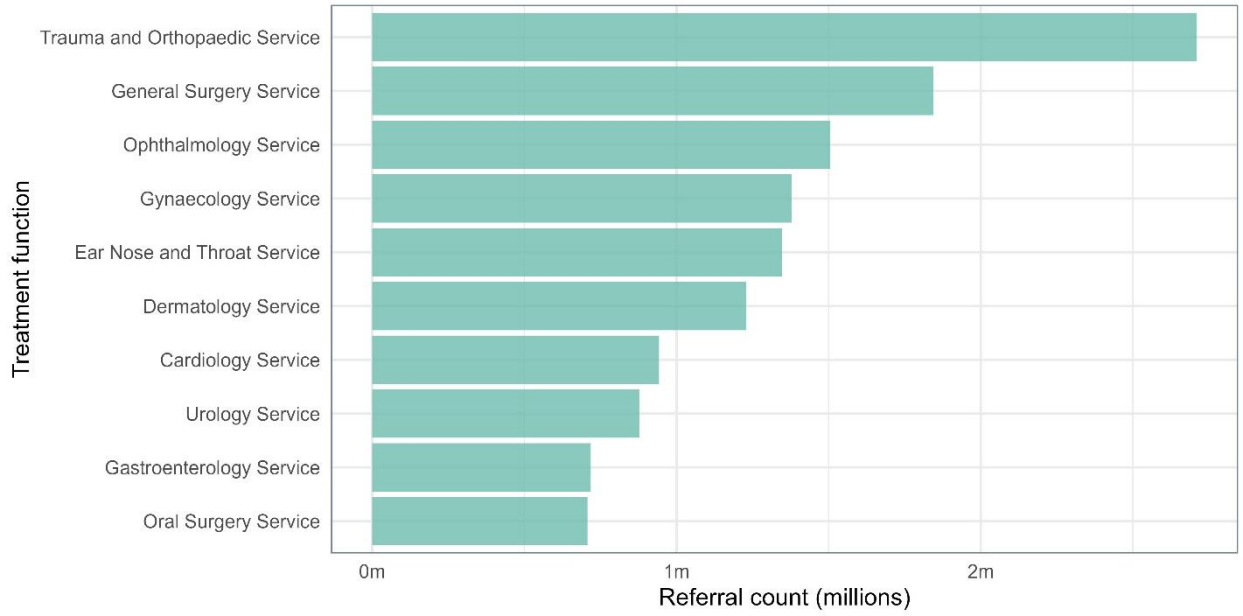



***Figure 5 - Count of OPRD clinical referral counts by treatment function.***

# What can the data be used for?

The OPRD can be used to identify referrals linked to a specific cohort of patients via *ALF_PE*; however, if only general population counts and trends are of interest, it may be easier to access these from the StatsWales website, which publishes publicly available information from the OPR ds (StatsWales, n.d.).

The OPRD can be linked to a cohort or to wider SAIL data to identify referrals related to a patient or group of interest. This may be useful in calculating healthcare utilisation, although not all referrals result in an outpatient attendance, and some referrals will result in multiple outpatient attendances. Therefore the OPDW data source may be a better alternative for information about outpatient healthcare utilisation. A further limitation to calculating referral counts is that the OPRD has no referral ID, so it is not possible to distinguish between duplicate rows and multiple same-day referrals.

The OPRD could be used to identify trends in the proportion of referrals from each HB or service provider. Similar comparisons could be made by referral destination. However, the lack of a unique referral linkage field between OPRD and OPDW, and the absence of an indicator for rejected referrals, make it difficult to draw definitive conclusions. Further, neither the OPRD nor the OPDW provides information on why a referral does not result in an outpatient appointment. A triage outcome field was added when the PCR was implemented to identify returned referrals; however, this field had not been incorporated into the OPRD at the time this report was produced.

# Data limitations encountered

**Waiting time calculations:** The OPRD cannot be used to calculate official waiting times because the waiting time start date can change post-referral if the patient causes a delay. The *WAITING_LIST_DT* field in the OPDW should therefore be used for this purpose. The OPDW contains both the referral date and the clinical referral date, so any definition of waiting time is likely to be easier to calculate from the OPDW.

**No unique referral ID:** The OPRD data source has no unique referral ID. This is despite the data standards change notice issued in 2010, which confirmed that a referral identifier should be added to the OPR ds (Welsh Information Governance and Standards Board, 2010). This makes it difficult to identify duplicate rows, which could be resolved by including an encrypted referral ID.

**Duplication:** The OPRD data appears to contain duplicate rows. However, the lack of a referral ID makes it unclear whether the duplicates accurately reflect multiple referrals or whether they are data errors.

***REASON_FOR_REF*:** The reason for referral must be recorded as a valid clinical code or term (NHS Wales, n.d.-b); however, a large number of codes recorded, including the three most commonly recorded codes, do not align with Read, ICD-10, Systematised Nomenclature of Medicine (SNOMED) or Main Treatment Function codes, so it is not always clear which system is being used.

**Derived/description fields:** Many fields within the OPRD data source provide a derived version or description of another existing field. It is assumed that the derived fields are data-cleansed versions of the originally captured data, but there does not appear to be any clear documentation on this. Some of these fields show no difference between the original and derived fields, such as *REF_PRIORITY_TYPE_CD*. Other fields appear to have been cleansed; however, a review of the CON_SPEC_DERIVED_CD and PAT_ETHNIC_GRP_DERIVED_CD fields suggests the cleansing methods used may not be current. Therefore, researchers may prefer to conduct their own cleansing, linkage, or grouping to ensure they use appropriate reference data.

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# Glossary

| Abbreviation | Description |
|---|---|
| **ADR UK** | Administrative Data Research UK |
| **ALF** | Anonymised Linkage Field |
| **DHCW** | Digital Health and Care Wales |
| **GDP** | General Dental Practitioner |
| **GMP** | General Medical Practitioner |
| **ICD-10** | International Statistical Classification of Diseases Version 10 |
| **IGRP** | Information Governance Review Panel |
| **HB** | Health Board |
| **NWDSS** | NHS Wales Data Switching Service |
| **OPDW** | Out Patient Database for Wales |
| **OPR ds** | Outpatient Referrals data set |
| **PCR** | Patient Care Referral data |
| **SAIL** | Secure Anonymised Information Linkage (SAIL) Databank |
| **SNOMED** | Systematised Nomenclature of Medicine |
| **VASS** | Validation at Source Service |

# Disclaimer

This work was produced using administrative data accessed through the SAIL Databank. The use of the data in this work does not imply the endorsement of the SAIL Databank or data owners in relation to the interpretation or analysis.

This work uses research data which may not exactly reproduce National Statistics aggregates.

# Acknowledgements

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This Data Insight has been produced by the ADR Wales Ymateb research team. It provides a snapshot of informative research currently underway at ADR Wales but is not intended to provide a complete picture of work undertaken within this field or the ADR Wales programme of work. The information presented in this Data Insight has been reviewed by ADR Wales colleagues with expertise within this thematic area and accepted to be accurate at the point of publication. Views expressed in this Data Insight are those of the researchers and not necessarily those of ADR Wales partner organisations.

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## Publication contact

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