


NHS Digital Data Services

Supporting The NHS and Improving Care

How can we use Data for Good in the Public Sector? 17th October 2018



Our vision is to
harness the power of
information and
technology to **make**
health and care better

Information and technology for better care

NHS Digital strategy 2015-2020

Vision Statement

By 2020, we will have revolutionised the way technology, data and information are used to transform the delivery of England's health and social care services.

Our priorities



Ensure that every citizen's data is protected

Assure the quality, safety and security of data and information flows across health and social care. Citizens will share their data with confidence knowing that it will be kept confidential and shared only when appropriate and for their benefit.



Establish shared architecture and standards for the benefit of everyone



Implement services to meet national and local needs



Support organisations to get the best from technology, data and information



Make better use of health and care information

Data Services

- **NHS Spine** – connecting, messaging, and providing frontline support
- **Secondary Use** – planning, research, commissioning, service improvement

NHS Spine

Spine supports the IT infrastructure for health and social care in England, joining together over 23,000 healthcare IT systems in 20,500 organisations.

Comprises two main systems...

- **Spine Core:** safely supports information-flow and national digital services such as:
 - Electronic Prescription Service
 - Summary Care Record
 - e-Referral Service
 - Sharing of child protection information via the Child Protection Information System
- **Citizen Identity Service (CIS):** manages secure access



Driving efficiency across the system



63%

of all prescriptions
now electronic



99%

community pharmacies
have access to SCRs



75%

of local authorities live
with CP-IS



9.6m

people use GP
Online services



70k

Referrals use the
e-Referral Service
every day



74%

of CCGs live with
unified free Wi-Fi

Child Protection – Information Sharing (CP-IS)

CP-IS is helping health and social care staff to share information securely to better protect society's most vulnerable children.

When a child is known to social services and is a Looked After Child or on a Child Protection Plan, basic information about that plan is shared securely with the NHS.

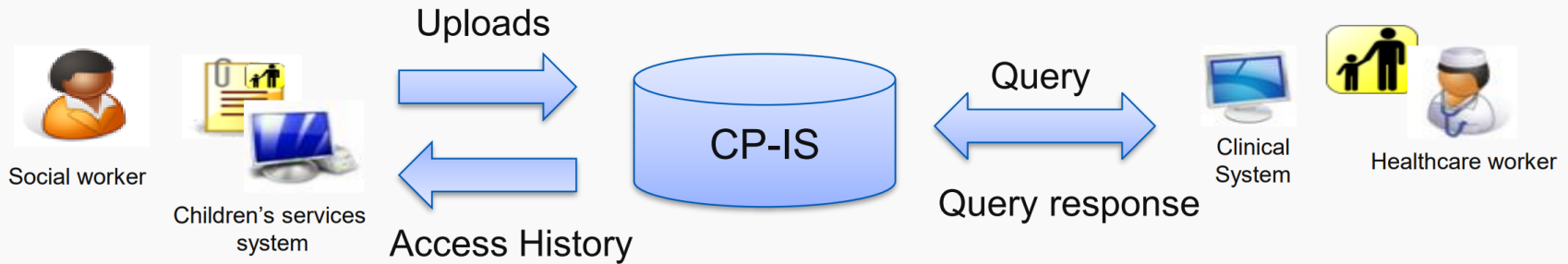


If that child attends an NHS unscheduled care setting, such as an emergency department or a minor injury unit:

- the health team is alerted that they are on a plan and has access to the contact details for the social care team
- the social care team is automatically notified that the child has attended, and
- both parties can see details of the child's previous 25 visits to unscheduled care settings in England


How does CP-IS work?

1. Local authority records CPP/LAC/UCPP information locally within social care system including NHS Number
2. CPP/LAC/UCPP information is automatically submitted to CP-IS daily



3. NHS user searches for child details in clinical system
4. NHS system queries CP-IS and notifies user of CP-IS record for that child
5. Access History Notification is created when NHS user accesses CP-IS information and this triggers a message back to the local authority system

CP-IS in the SCR application

Find a patient Help Print Exit Summary Care Record 

Ricky JOHNSSON DoB 24-Jun-2002 Male NHS 999 500 1306 GP Practice B82071 Address 10, Heath Moor Drive, York, North Yorkshire, YO10 4NF

Patient Details Child Care Alert

Current Child Protection Information

| Type of Plan | Start Date | End Date | Responsible Local Authority | Emergency Duty Tel Number | Office Hours Tel Number |
|-----------------------|-------------|-------------|-----------------------------|---------------------------|-------------------------|
| Child Protection Plan | 24-Jun-2004 | 24-Jun-2020 | LEEDS CITY COUNCIL | tel:01132222222 | tel:01133573581 |

Child Protection Information Previously Viewed By

This table outlines the date, healthcare worker and care organisation where a child's protection plan or looked after child's status has been accessed.
Please note the information viewed is not necessarily the same as the current information shown above, as the Child Protection Information may have changed over time

| Date & Time | Viewer's Name | Role | Organisation |
|-------------------|---------------|-------------------------------------|--|
| 13-May-2014 09:32 | Mr Raines | Consultant | LEEDS PARTNERSHIPS NHS FOUNDATION TRUST |
| 18-Mar-2014 09:03 | Dr Foster | Designated Doctor | OLD SCHOOL MEDICAL CENTRE |
| 01-Jan-2014 09:23 | Mr Flemming | Children's safeguarding Lead Nurse | ASHFIELD MEDICAL CENTRE |
| 28-Dec-2013 09:23 | Mr Reynolds | Children's safeguarding Lead Nurse | ASHFIELD MEDICAL CENTRE |
| 23-Dec-2013 11:03 | Dr Reynolds | Children's safeguarding Lead Doctor | ASHFIELD MEDICAL CENTRE |
| 14-Dec-2013 01:03 | Dr NORMAN | Named Doctor | Selby OOH |
| 13-Dec-2013 17:03 | Mr Joinson | Designated Nurse | YORK HOSPITALS NHS FOUNDATION TRUST |
| 09-Dec-2013 15:03 | Mr Kirk | Designated Nurse | YORK HOSPITALS NHS FOUNDATION TRUST |
| 04-Dec-2013 14:42 | Dr Merton | Children's safeguarding Lead Doctor | SCARBOROUGH AND NORTH EAST YORKSHIRE HEALTH CARE NHS TRUST |

CONFIDENTIAL: PERSONAL PATIENT DATA accessed by RAINES, Ashley - Consultant - LEEDS PARTNERSHIPS NHS FOUNDATION TRUST Version: jg|-8846-mon2-4.20140305180427

What do people think of CP-IS?

Hertfordshire County Council

“CP-IS removes the need to search for and provide information manually and by phone, freeing up our resources to apply elsewhere.”

London Borough of Hackney

“The CP-IS automated notification was the only way the social worker would have found out about the incident.”

Portsmouth Hospital NHS Trust

“CP-IS is key to us taking a child-centred approach and ensuring they receive the best possible care and protection wherever they are in the country.”

Dashboard

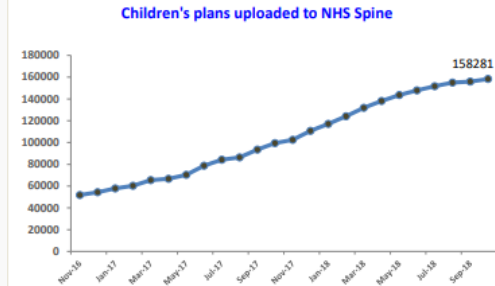
CHILD PROTECTION - INFORMATION SHARING (CP-IS) Project Dashboard

Summary

Updated: 08/10/2018

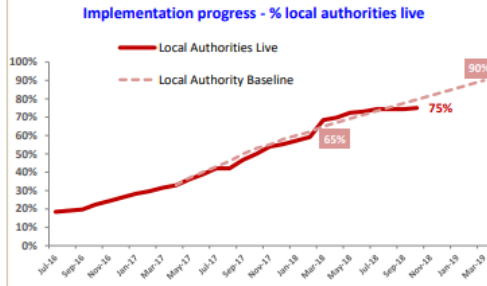
Deployment: Plans Uploaded

158281 Plans uploaded for 144681 Children



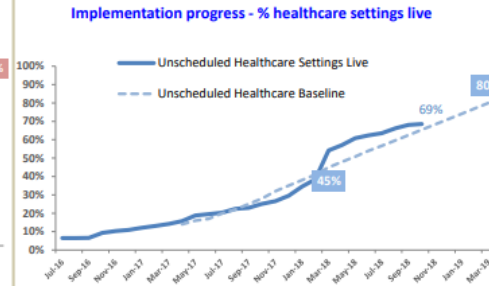
Deployment: Local Authorities Live

114 Local authorities



Deployment: Healthcare Settings Live

769 Healthcare settings



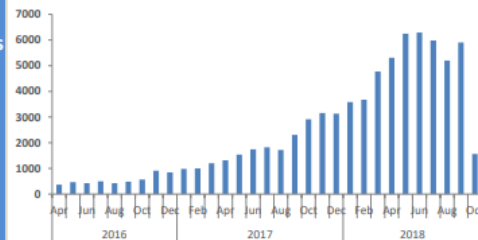
Usage: Alerts received by Social Workers

There are 144681 children on the CP-IS system:

- 39589 (27.4%) children have presented 78633 times to unscheduled healthcare settings since April 2015

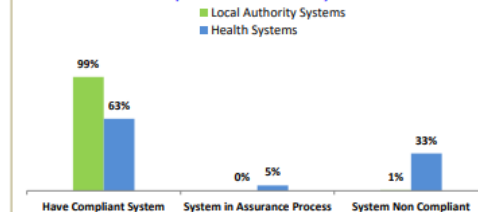
- This has alerted 113 local authorities

CP-IS alerts received by local authorities per month, to date



Software Suppliers: Systems Readiness

CP-IS compliance status of ICT systems used



The Local Authority figure will reach 100% compliant when all RAISE legacy users have migrated to accredited systems.

Secondary Use



Primary care



Secondary care



Emergency care



Community services



Maternity services



Mental health



Social care



Audits and registries



Prescribing and medicines



Population health



Facilities and estates



Workforce



Indicators



National Casemix Office



Data standards



Data Services for Commissioners



Data quality



Data quality



Data dissemination



Future work with data

Lots of Data

Hospital Activity in England - Commissioning Datasets (CDS)

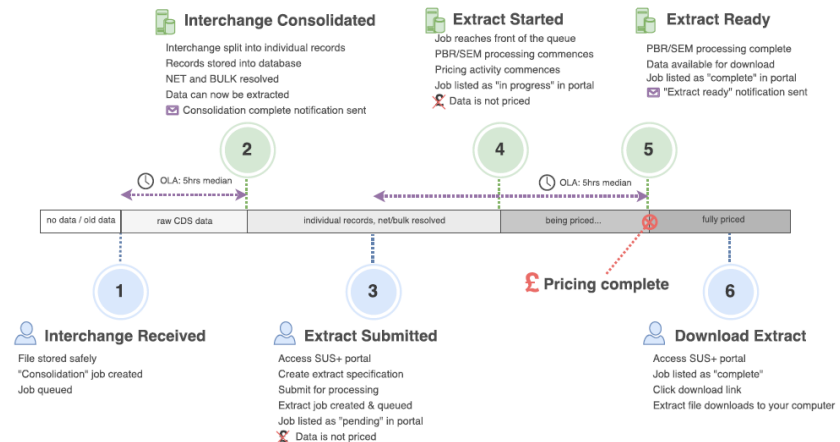
Admitted Patient Care, Outpatients, A&E Attendances Person based, episode and attendances. Administrative codes, diagnosis and procedures.

Key stats - May 1st 2018

- **Incoming CDS data:**
 - 500GB per month received (uncompressed)
 - 12 million records on the peak day
 - 100 million records per month
 - Peak 4088 records per second.
- **Extracts:**
 - 2.4 billion rows extracted in the last 30 days
 - 450 million rows on the peak day - average of 5208 records per second.
 - 350GB a month (compressed)
 - 67GB on the peak day (compressed)
- Over a year, supports activity of a value of **£30 Billion.**

| Notation | | DATA GROUP OVERVIEW: CDS V6-2 TYPE 020 - OUTPATIENT COMMISSIONING DATA SET |
|--------------|---------------|---|
| Group Status | Group Repeats | FUNCTION: To support the details of an Outpatient Attendance, or a missed Appointment. |
| M | 1..1 | DATA GROUP: CDS V6-2 Type 001 - Commissioning Data Set Interchange Header One per Interchange submitted to the Secondary Uses Service. Multiple Commissioning Data Set Messages may be submitted in a single Commissioning Data Set Interchange. |
| M | 1..* | DATA GROUP: CDS V6-2 Type 003 - Commissioning Data Set Message Header One per Commissioning Data Set Message submitted to the Secondary Uses Service. |
| M | 1..1 | DATA GROUP: CDS TRANSACTION HEADER GROUP Dependent upon the Commissioning Data Set Submission Protocol being used, one of the following must be used per Commissioning Data Set Message submitted to the Secondary Uses Service: CDS V6-2 Type 005B - Commissioning Data Set Transaction Header Group - Bulk Update Protocol Or CDS V6-2 Type 005N - Commissioning Data Set Transaction Header Group - Net Change Protocol |

| | | |
|---|------|---|
| O | 0..1 | DATA GROUP: PATIENT PATHWAY |
| M | 1..1 | DATA GROUP: PERSON GROUP (PATIENT) |
| M | 1..1 | DATA GROUP: PATIENT IDENTITY |
| R | 0..1 | DATA GROUP: PATIENT CHARACTERISTICS (CARE ACTIVITY) |
| R | 0..1 | DATA GROUP: CARE EPISODE |
| R | 0..1 | DATA GROUP: PERSON GROUP (CONSULTANT) |
| R | 0..1 | DATA GROUP: INITIAL DIAGNOSIS GROUP (ICD) |



Publications

- <https://digital.nhs.uk/search/document-type/publication/publicationStatus/true?sort=date&area=data>

Filter by: Reset

DOCUMENT TYPE -
Publication x

PUBLICATION YEAR -
2018 (235)
2017 (316)
2016 (367)
2015 (357)
2014 (305)
2013 (306)
[Show all \(19\)](#)

MONTH -
December (268)
November (237)
October (295)
September (313)
August (250)
July (245)
[Show all \(12\)](#)

PUBLICATION STATUS -
Published x

CATEGORY -
Outcomes (106)
Conditions (867)

[All](#) [Data and information](#) [Systems and services](#) [News and events](#)

Search results

2,897 results sorted by date. Sort by:

Publication

[Mental Health Act Statistics, Annual Figures 2017-18](#)
9 Oct 2018
This publication contains the official statistics about uses of the Mental Health Act1 ('the Act') in England during 2017-18.

Publication

[Practice Level Prescribing - July 2018](#)
5 Oct 2018
Published: 05 October 2018 - Practice level prescribing data is a list of all medicines, dressings and appliances that are prescribed by all practices in England and dispensed in the community each month. From October 2018 this data release will be moved earlier to be roughly 7 weeks after the data time...

Publication

[Personal Social Services Adult Social Care Survey, England - 2017-18 \[PAS\]](#)
2 Oct 2018
This report contains findings from the Adult Social Care Survey 2017-18 (ASCS). This national survey takes place every year and is conducted by Councils with Adult Social Services Responsibilities (CASSRs).

Publication

[Mental Capacity Act 2005, Deprivation of Liberty Safeguards England, 2017-18 \[PAS\]](#)
2 Oct 2018
This official statistics report provides the findings from the Mental Capacity Act 2005, Deprivation of Liberty Safeguards (DoLS) data collection for the period 1 April 2017 to 31 March 2018. DoLS are a legal framework that exist to ensure that individuals who lack the mental capacity to consent to

Dashboards

Fit notes issued by GP Practices

Experimental statistics

Registered patient coverage

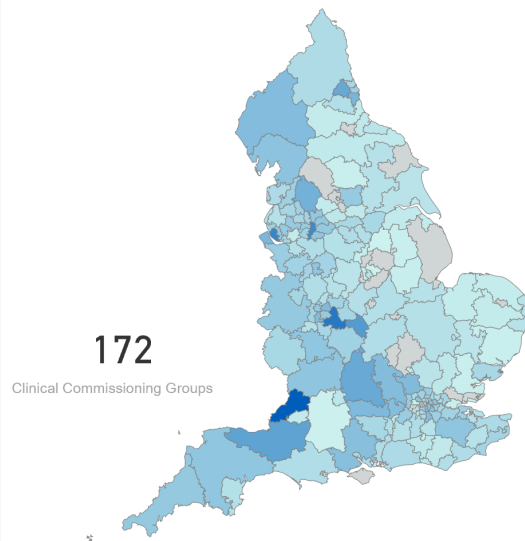


01 April 2015 to 31 March 2018

Month: All | Year: All | Commissioning Region name: All | Region name: All | Clinical Commissioning Group name: All

Data for the period 29 January 2018 to 4 March 2018 has been under-reported due to a technical issue. For more information see the data quality statement [here](#).

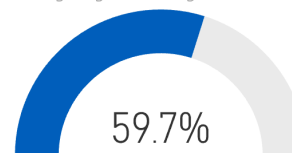
Distribution of fit notes by CCG



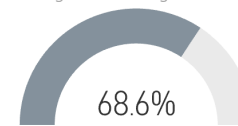
Total number of fit notes

16,180,694

Average England coverage

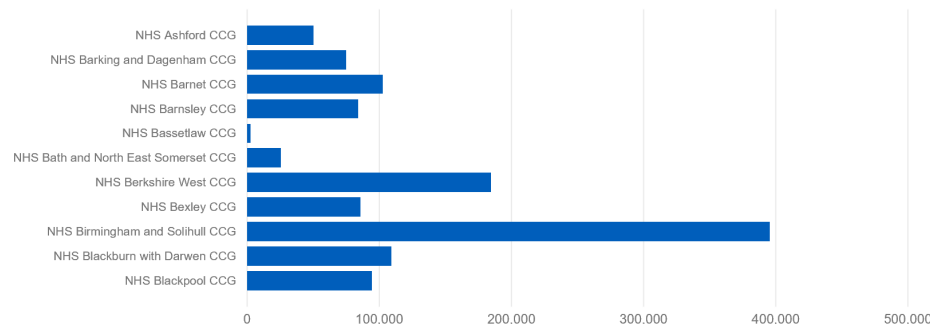


Average CCG coverage



England coverage includes fit notes not allocated to a CCG.

Number of fit notes by CCG



For more details on this publication and a link to the data files used visit the General Practice Data Hub landing page [here](#).

Clinical Audits and Registries

A clinical audit is a systematic review of care against explicit criteria. It is a way to find out if healthcare is being provided in line with standards, and it lets care providers, commissioners and patients know where their service is doing well, and where there could be improvements..

Some examples:

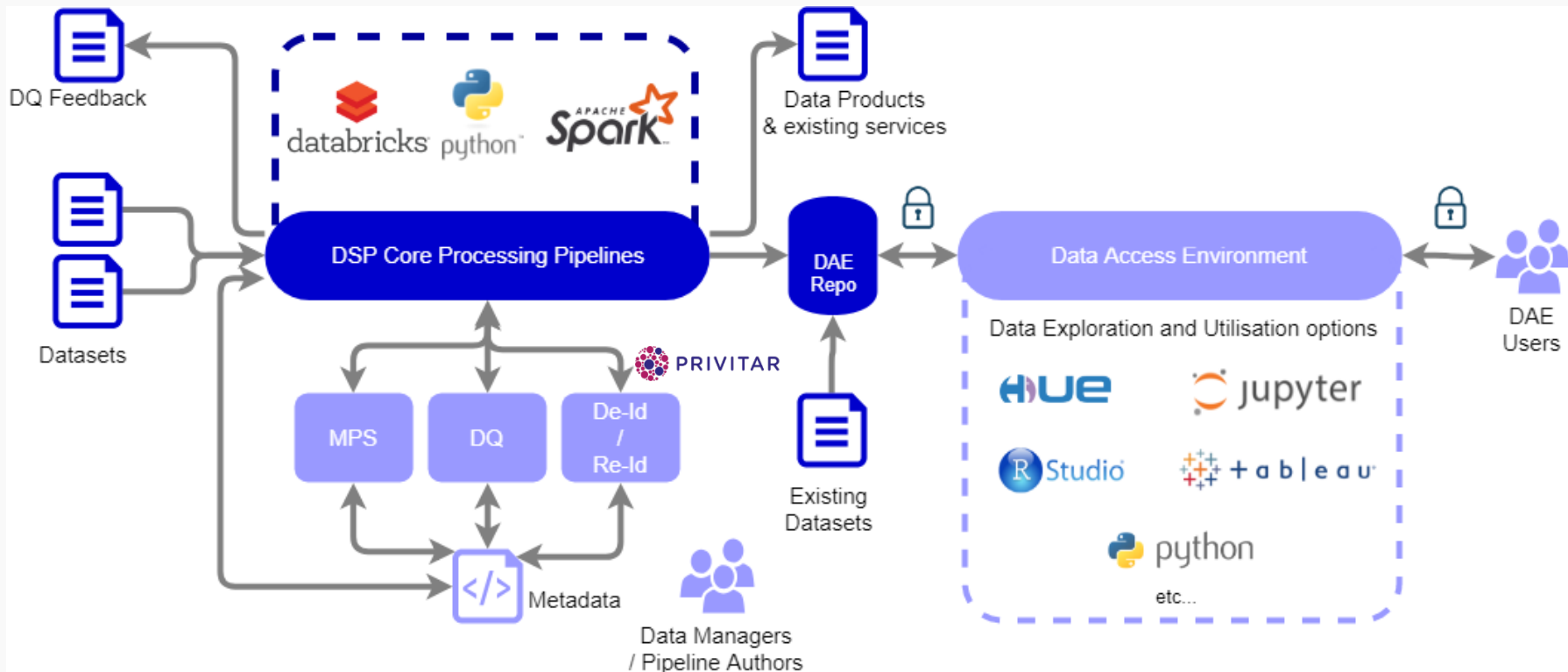
- **Breast and Cosmetic Implant Registry:** Details of breast implant procedures completed in England by both the NHS and private providers, where patients have consented to their data being added.
- **National Bowel Cancer Audit:** A high-profile, collaborative, national clinical audit for bowel cancer, including colon and rectal cancer.
- **National Diabetes Audit:** One of the largest annual clinical audits in the world, it measures the effectiveness of diabetes healthcare against NICE Clinical Guidelines and NICE Quality Standards in England and Wales for both primary and secondary care.
- **National Oesophago-Gastric Cancer Audit:** Evaluates the process of care and the outcomes of treatment for all OG cancer patients, both curative and palliative.

Data Services Platform

The Data Services Platform (DSP) is a new system we are developing, that will transform the way that NHS Digital assembles, analyses, interprets and disseminates data. It will provide:

- a single landing portal for data from providers
- a way of identifying patients in multiple data sets
- a standard governance framework
- a system for de-identifying and re-identifying data
- a remote access environment enabling those with permission to access data without it leaving NHS Digital

Data Services Platform



Questions and Discussion

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