



HARVEY WALSH

HEALTH INFORMATICS

Sue Beecroft – CEO Harvey Walsh Limited

USE MY DATA WORKSHOP

Confidential

October 12th 2017

Harvey Walsh

- Harvey Walsh was set up by Sue Beecroft and Julia Wilkins in 2003 and joined the OPEN Health Group in 2012, offices in Cheshire, Marlow and London
- Harvey Walsh was originally established to support implementation of national guidance e.g. NICE at the local level



- Harvey Walsh is a healthcare informatics and patient outcomes consultancy working successfully across the NHS, Pharmaceutical and Medical Device Industries using real world data to improve patient outcomes and to provide the insights and evidence the NHS needs

Background – why we use data

- 2004 – 2008 worked with National Institute for Mental Health on Schizophrenia, Bi-Polar and Personality Disorders:
 - Evaluation of patient pathways
 - Time to treatment
 - Outcomes and improvements
- These and other projects demonstrated that ‘local data’ was:
 - Inconsistent and/or absent
- Therefore implementation was difficult as there was no benchmark and thus no way of evaluating implementation and improvements
- 2008: working with NHS Salford – ‘data’ used to evaluate Diabetes pathways accurately
- 2009 - Information Centre granted a licence to Harvey Walsh to hold and process Hospital Episode Statistics Data

Data Security

- Harvey Walsh takes data security very seriously
- Regular independent audit
- ISO27001/2013 certification
- 100% compliant with the IG Toolkit & Data Protection Act
 - IGT assessment report online (Assessment Report - 8HQ37)
- Work within the N3 network where necessary
- Cyber essentials certified



What patient data do we have?

- NHS Digital under licence: Hospital Episode Statistics (HES)
- NHS Digital publically available data:
 - Quality & Outcomes Framework (QOF)
 - GP Level Prescribing Data
 - National Audit Data Sets
- Anonymised Primary Care Data (**Px Insights**) powered by THIN (The Health Information Network) –from 400+ practices nationally
- Harvey Walsh also create **new real world data sources** using a range of data collection and extraction techniques, helping our clients to harness the data that they need to help patients

Hospital Episodes Statistics (HES) Data

The HES data is classed as '*pseudonymised*' this means we do not have:

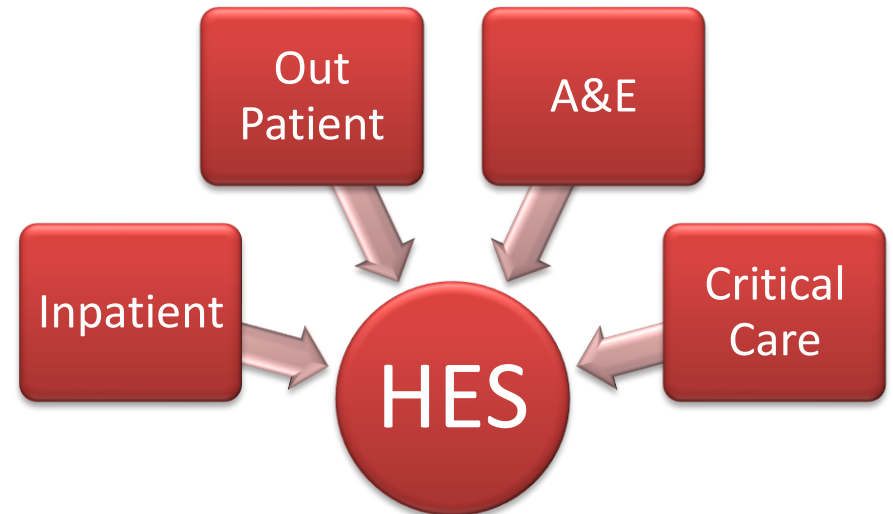
Patient names, addresses or postcodes

Date of birth

NHS Number or Patient Number

The data have a HES Identifier which is a unique number that is linked to a record.

This number allows us to be able to analyse outcomes across time and across different organisations



HES Identifier Example:

AB3465DUMMY456876A3C4E521E81B3FD

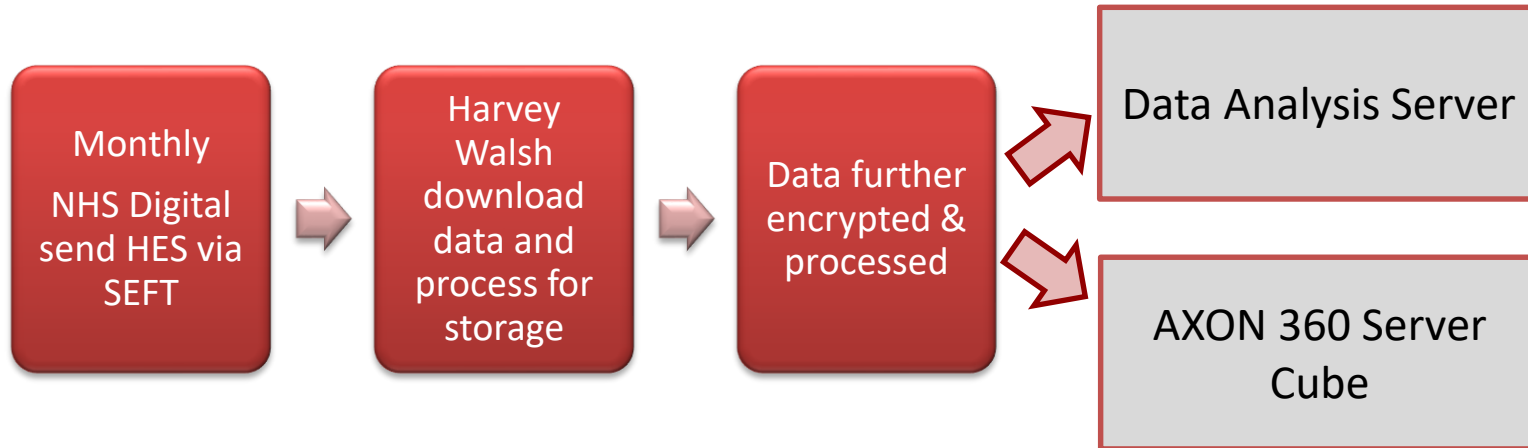
What does HES data look like?

- HES data supplied by NHS Digital to Harvey Walsh is classed as ‘record level’ data
- The data are all in code when record level e.g.
 - if a patient has low back pain this will be shown as M545
 - If the patient has attended the Royal Liverpool Hospital this will be shown as RVV
- Once received, Harvey Walsh further encrypt the data for secure storage & processing

Patient ID	hes_year	epikey	sex	classpat	actvage	admiage	startage	spelbgin	speldur	spelend	epiorder	admidate	admimeth	admindcat	t	admisorc	diag_01	diag_02	diag_03
Pat00001	2012	2012016361	1	1	63	63	63	2	10	Y	1	2013-01-20	21	1		19	I460	I211	I251
Pat00002	2012	2012016161	1	1	41	41	41	2		N	1	2013-02-15	21	1		19	T430	X619	R568
Pat00002	2012	2012016161	1	1	41	41	41	0	3	Y	2	2013-02-15	21	1		19	T430	R568	J459

Example of **dummy** ‘patient level record data’ and how data looks when it is received prior to processing by Harvey Walsh.

Security and Processing of HES Data



The data are held in a secure server facility in Cheshire

Harvey Walsh are ISO27001/2013, NHS IG Toolkit 100% and Cyber Essentials approved



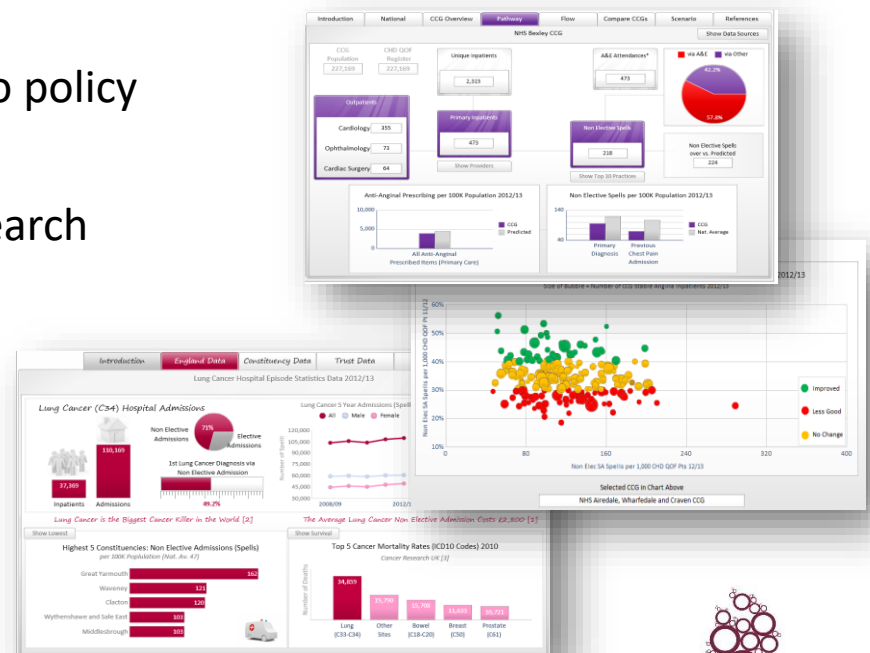
Control of HES data

- The data provision and management of HES is strictly controlled by NHS Digital via a robust Framework Contract and Data Sharing Agreement (DSA)
- September 2016 Harvey Walsh took AXON offline because:
 - **It was not recorded in the Data Sharing Agreement that AXON was hosted externally***
- October – December 2016: NHS Digital undertook robust audit of Harvey Walsh and all processes
- March 2017 – Audit published and IGARD and NHS Digital approved AXON to go live again

NOTE: *There was no security risk to the data or patients. Other approved activities other than AXON could continue as the processing and storage of these activities was correctly recorded in DSA

What do we do with the HES data?

- We undertake analysis and produce tools such as dashboards, models and publications to support the following purposes:
 - Analysis of pathways and demonstration of outcomes and variance
 - Benchmarking of organisations
 - Uptake of guidance and adherence to policy
 - Burden of disease analysis
 - Health economic evaluation and research
 - Quality and outcome analysis
 - NICE submissions
 - Predictive analytical modelling



Who do we provide our services to?

- Harvey Walsh provides services to:
 - NHS organisations
 - Pharmaceutical Companies
 - Device Companies
 - Patient Groups and Charities
- We either work directly with the commercial company or NHS/Charity or in a collaborative partnership between the commercial company and the NHS



Public Health
England

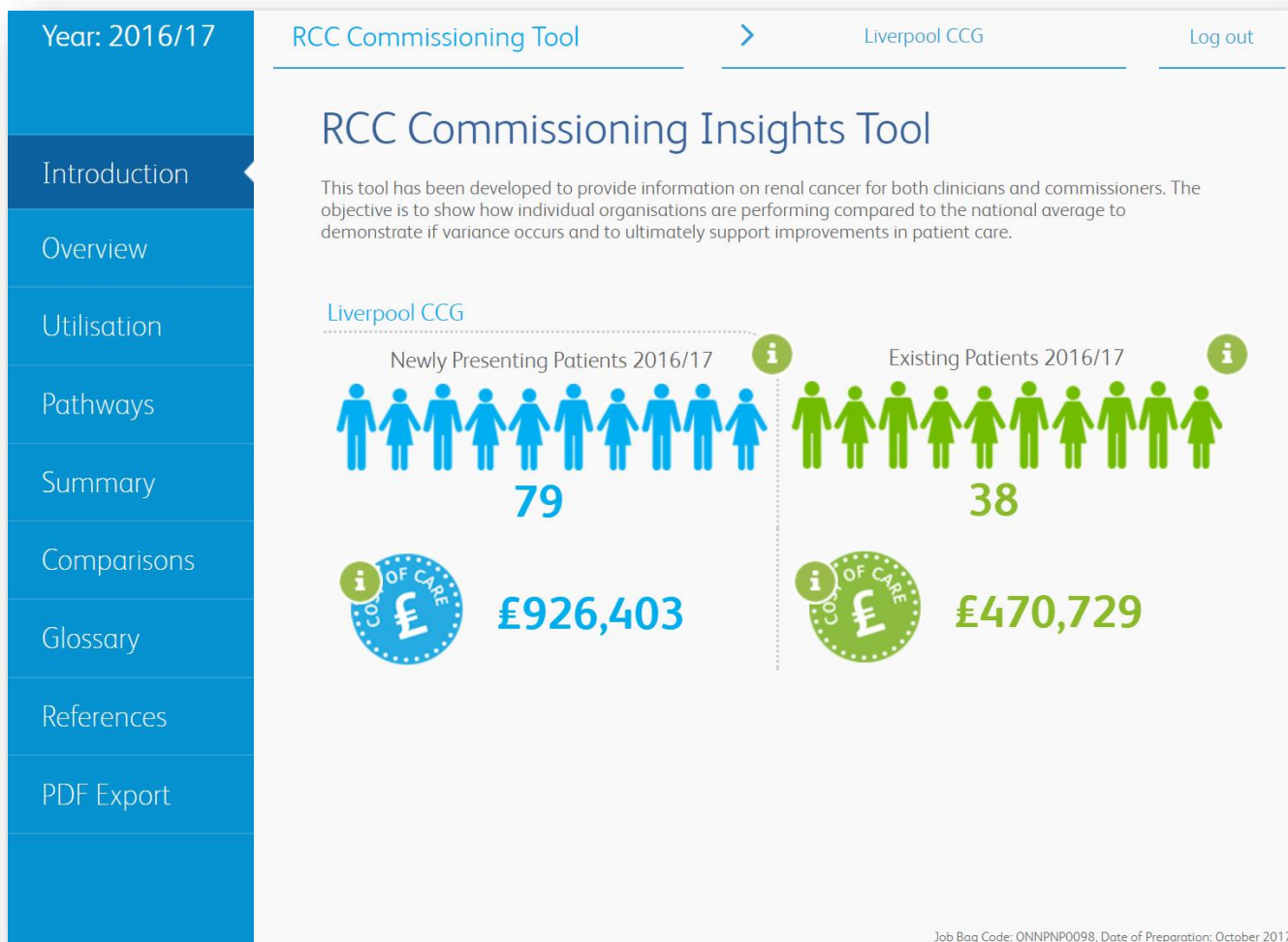
Whatever we do and whoever we do it with we need to demonstrate a benefit for patients and or the NHS. Every single output we produce is recorded in an output register to prove that there is a benefit and this is provided to NHS Digital for audit purposes.

Case studies

- Oncology Pathway Programme – Pharmaceutical Company
- Atrial Fibrillation/Stroke Reduction Programme – AHSN & Commercial
- National Performance Report – Charity/Patient Group
- NICE Submission/evidence – Device Company
- AXON 360 – Pharmaceutical/Device/NHS/AHSN

Oncology Project in Renal Cancer

Interactive Dashboard used with hospitals & CCGs



Case Study – AF AHSN & Commercial

Multi-data hub for use by GPs and CCGs

The screenshot shows a web application interface with a navigation bar at the top containing tabs for 'Introduction', 'Overview', 'Pathways', 'QOF', 'SSNAP', 'GRASP-AF', 'Prescribing', 'Summary', and 'Savings'. A 'Glossary' button is located in the top right corner. The main content area is titled 'Stroke & Atrial Fibrillation' and features an 'INSIGHTS' section. The text in this section describes the Greater Manchester Academic Health Science Network (GM AHSN) and its mission to improve population health through learning, leadership, and innovation. It also mentions a 5-year license from the Treasury and the National Commissioning Board, and the adoption of NICE guideline CG180 for the management of Atrial Fibrillation (AF). At the bottom of the page, there are logos for the Stroke association, Public Health England, Harvey Walsh Market Access, and the Greater Manchester Academic Health Science Network. A large, colorful graphic of stylized human figures is positioned on the right side of the page.

Introduction Overview Pathways QOF SSNAP GRASP-AF Prescribing Summary Savings

Glossary

Stroke & Atrial Fibrillation

INSIGHTS

The Greater Manchester Academic Health Science Network (GM AHSN) consists of membership organisations such as CCGs, provider trusts and universities as well as partners in research, technology and industry. By spreading learning, leadership and innovation we will deliver significant improvement to the health of the population, engineer real opportunities for wealth creation and build new relationships with the industry.

Under our 5-year license from the Treasury, the National Commissioning Board requires us to systematically implement and measure best practice in NICE guidance and the six High Impact Innovations described in Innovation Health and Wealth.

In our suite of CVD work, we are prioritising the adoption of NICE guideline CG180 The management of Atrial Fibrillation (AF). The following information will support our members understanding of the challenges in this pathway and the opportunities to prevent AF related stroke.

Stroke
association

Public Health
England

HARVEY WALSH
MARKET ACCESS

GREATER
MANCHESTER
ACADEMIC
HEALTH
SCIENCE
NETWORK

Case Study – RNIB

Analysis, Report & Publication

- 2013 initial analysis and report produced for the RNIB on the provision of cataract surgery across England
- Outputs showed massive variation
 - Access to surgery
 - Time from presentation to treatment
 - Second eye surgery
- 2016 and 2017 analysis redone
 - Demonstrable improvements in access across England
 - Less variation
 - More procedures
 - Less waiting time



Case Study – Neotract and Urolift

Analysis, report & NICE submission

“UroLift treatment for enlarged prostate has been highlighted as a strategically important product for the future of the NHS, as one of a handful of disruptive healthcare technologies that can improve the UK’s public healthcare system, in a new report and funding mechanism for innovations by the NHS.” Nov 2016

Harvey Walsh provided bespoke 5 year HES data analytical report looking at the burden both pre and post procedure for patients with BPH highlighting the huge cost of post-procedure complications associated with current TURP procedures.

This data was submitted to NICE and allied NHS bodies for approval and accelerated funding with great success.

As a result the NHS will save money and more patients will have a better quality of life.



Case Study – AXON 360

Interactive Reporting System

