

Collaborative working with US Analysts

NHS Digital & US Department of Health & Human Services



Information and technology
for better health and care

presented by Chris Dew,
Information Analysis Lead Manager

Our mission

To harness the power of information and technology to make health and care better

Our role

The national information and technology partner to the health and care system



We do this together...

Academia partners:

200+ research studies

UNIVERSITY OF LEEDS

Citizens and media



Providers/places



Other key partners:

medConfidential
KEEP OUR SECRETS

ico.
Information Commissioner's Office

Understanding Patient Data

NODE LEEDS



Digital

Government:

Cabinet Office

NHS Improvement

NHS England

Genomics England

MHRA
Regulating Medicines and Medical Devices

Infrastructure and Projects Authority

Department of Health & Social Care

Care Quality Commission

NICE
National Institute for Health and Care Excellence

Public Health England

Health Education England

Research partners:

MRC
Medical Research Council

NHS
National Institute for Health Research

HDRUK
Health Data Research UK

amrc
ASSOCIATION OF MEDICAL RESEARCH CHARITIES

Objectives for collaboration

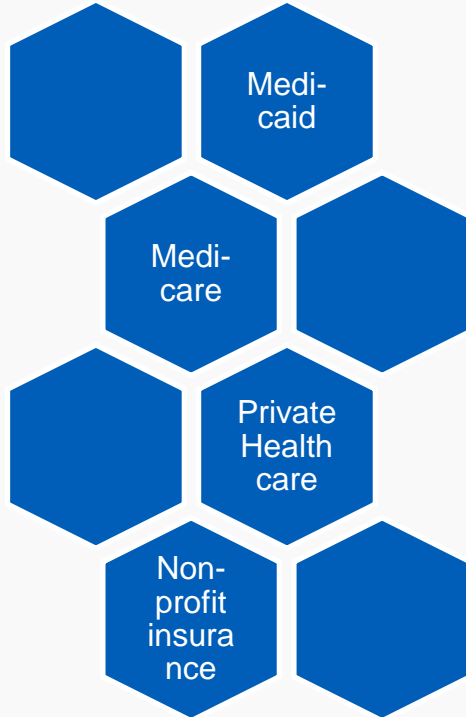


Context:

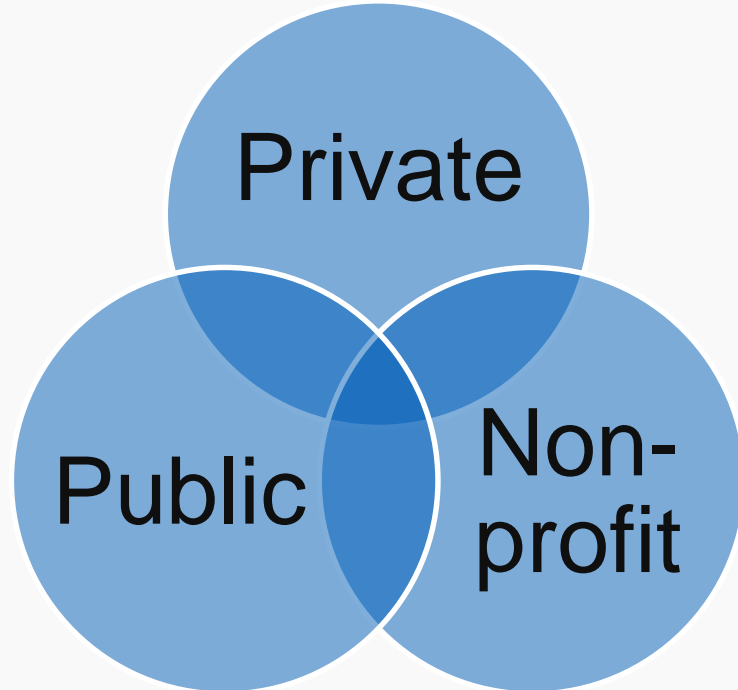
- Opioid Addiction
- Anti-microbial resistance

US healthcare system

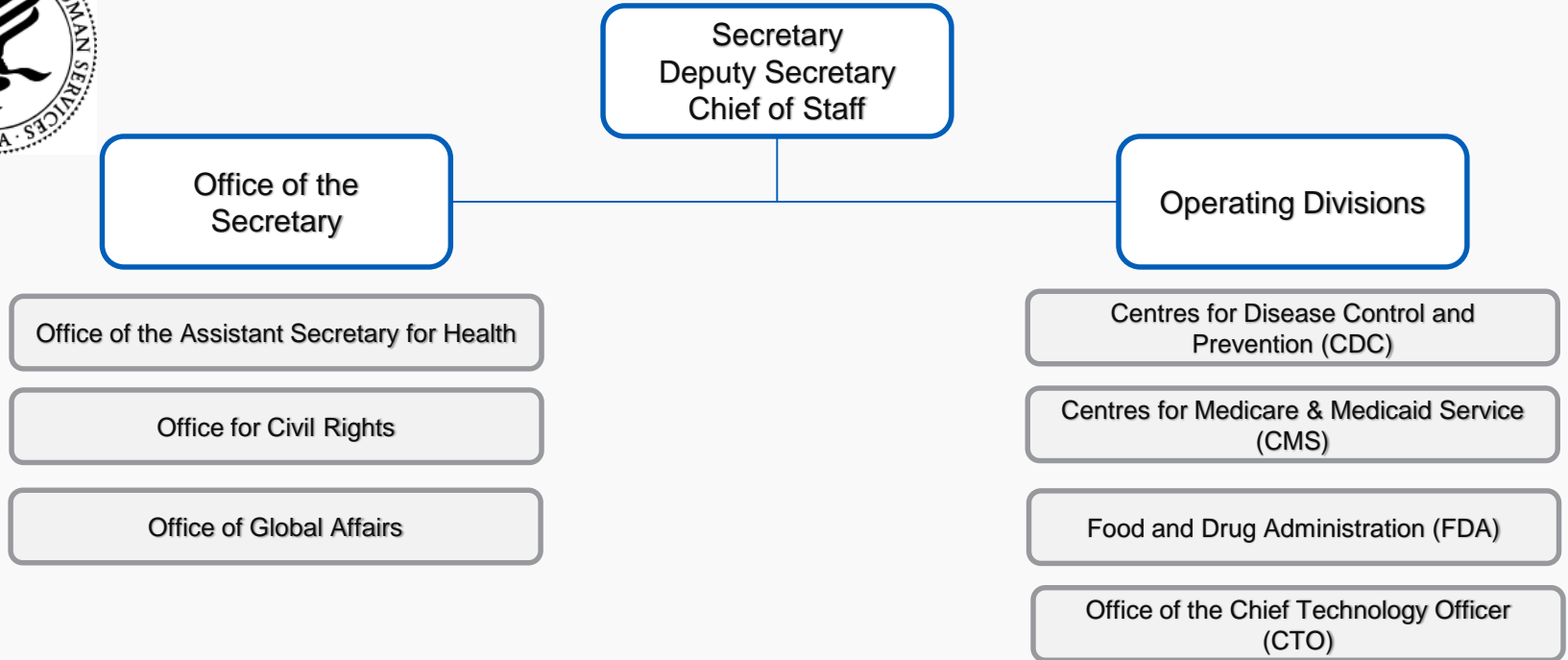
Insurance



Providers



Department of Health and Human Services



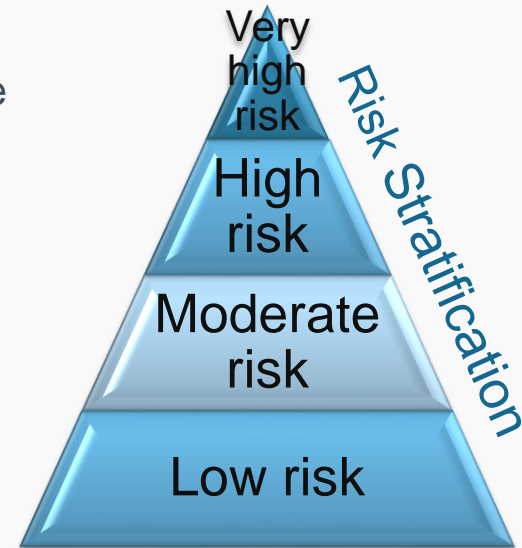
Opioid addiction

Three focus areas :

- Treatment – improving access to treatment and services
- Prevention – predicting the supply and movement of opioids
- Usage – identifying at-risk populations for opioid abuse and misuse

Recommendations:

- Risk Stratification for Population and Prescription using FIHR
- Survival Analysis for treatment intervention
- Track demand for information and services like NHS Choices



Anti-microbial use and resistance

Challenge:

- Surveillance effort at local, state and federal (CDC) level
- Evaluate appropriate use including differences in prescribing rates across states
- Prediction variables
- Patient transfers and outpatient tracking

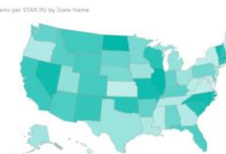
Recommendations:

- Medicines Optimisation dashboard
- Public health maps to improve policies and compliance
- Investigate real-time patient tracking



Example Medicines Optimisation Dashboard
Antibacterial items per STAR PU

State Name	Antibacterial items per STAR PU
Alabama	0.93
Alaska	0.97
Arizona	1.06
Arkansas	0.97
California	1.13
Colorado	1.08
Connecticut	1.16
Delaware	1.02
Florida	1.03
Georgia	0.98
Hawaii	0.92
Idaho	1.01
Illinois	1.42
Indiana	0.96
Iowa	0.75
Kansas	0.93



Purpose of the tool:
For use by local healthcare organisations to highlight variation in local practice and provide discussion on the appropriateness of local care.

How to use the tool:
States with a score over 1 indicate above average prescribing.

Definitions
STAR PU
Specific Therapeutic Group: Aggravate weightings based on prescribing limits. Allows more accurate and meaningful comparisons within a specific therapeutic group by taking into account the types of people who will be receiving that treatment.

Note:
Individual prescriptions



What we learnt



- A single health system and NHS numbers give us a distinct advantage in data analysis
- We have good quality, national data allowing rich analysis
- The US have a vast array of health data but due to privacy laws there is very little linkage or longitudinal work
- Innovation is key to improve health care technology
- Speaking to data analysts is essential when working with new datasets
- (Washington DC has really good museums and beautiful buildings)

The UK team

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