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Greater than the Sum of its Parts: The importance of linked data across government

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DigiGov Expo

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Greater than the Sum of its Parts

The importance of data linking to join up public sector initiatives and opportunities for AI.

About me

Lead Data Scientist, AI for Linked Data, BOLD, Ministry of Justice

- Ministry of Justice
- Better Outcomes through Linked Data
- AI for Linked Data
- Lead Data Scientist

Motivation

There are **millions** of **vulnerable** citizens in the UK

12 million victims of crime.
many of whom don't receive any support services

500,000
people with unmet needs for alcohol and drug treatment

250,000+
people at high risk of homelessness

275,000
people requiring substance misuse treatment

However, the **support** for the **vulnerable is uneven**

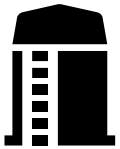
29%
of police investigations are closed through victim attrition.

65%
of people leaving custody are not adequately picked up by community-based treatment programmes

25%
of people leaving custody are released without access to suitable housing.

40%
of rough sleepers have a drug dependency which is not picked up by healthcare providers.

What are the **barriers** to government **supporting the vulnerable?**



Fragmented Systems

Siloed systems make it hard to join up separate datasets to give a holistic picture.

Complex Service Interactions

Vulnerable individuals interact with **multiple** government departments.

Inconsistencies across services

There is **no consistent identifier** to evaluate how individuals are **accessing different services.**

Community Sentence Treatment Requirements for offenders who are dependent on drugs or alcohol were introduced in 2003. The aim was to divert drug and alcohol users away from **prison** and into **treatment**.

Sentence to **treatment**, not **prison**.

Offenders enter **treatment** for an **alcohol** or **drug dependency**.

Crime is **reduced**, lives are **saved**, people move from harm to **hope**.

The responsibility for administering each step sits in **different government departments**

Ministry of Justice

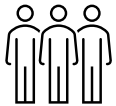
Department of Health and Social Care

…

How can we answer the following questions to evaluate the policy:

What are the **outcomes** for offenders **accessing** treatment?

Does access to treatment **reduce reoffending**?



What **characteristics** make it **more or less** likely an offender accesses **treatment?**

If we **don’t** have the **answer** to this **question**

Is an **offender** accessing **treatment?**

Better Outcomes through Linked Data (BOLD) programme

BOLD Programme Vision

- **Boost cross-government** collaboration for vulnerable adult services.
- Use **linked data** to **enhance decision-making**.
- Improve key **touchpoints** in service interactions.

Delivering Better Outcomes through Linked Data: BOLD

Cross-government

80 staff, 4 departments, working together as 1 team

Pilots

Four pilot projects across driving system change

Multi-disciplinary

Hybrid teams of policy people, analysts, tech specialists and others

Data Ethics

Complying with, and developing further, ethical best practice

BOLD is focused on four demonstrator pilot areas

Reducing Reoffending

- **Impact Analysis**: Utilize data to evaluate how specific interventions affect reoffending rates.
- **Comprehensive Approach**: Focus on crucial areas like employment, health, housing, and family to support offenders.
- **Strategic Alignment**: Support government efforts to address the root causes of reoffending and enhance rehabilitation outcomes.

Substance Misuse

- **Identify Success Factors**: Explore key elements that contribute to effective addiction rehabilitation for specific groups.
- **Targeted Groups**: Focus on prison leavers and rough sleepers to tailor rehabilitation strategies.

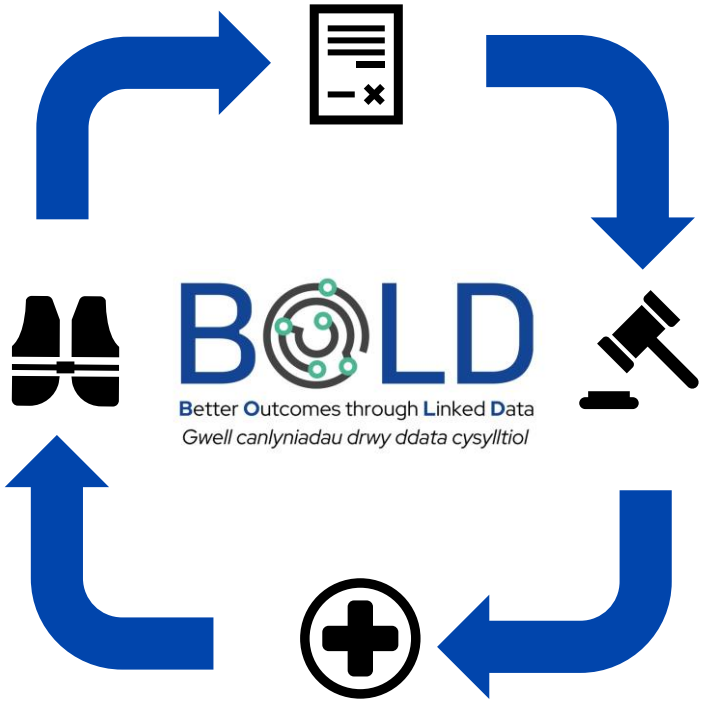
Victims Pathways

- **Support Effectiveness**: Evaluate how government and third sector services can best help victims cope, recover, and seek justice.
- **Enhanced Experience**: Aim to improve victims' interactions with the criminal justice system.
- **Positive Outcomes**: Use findings to ensure victims achieve favourable justice results.

Homelessness

- **Root Causes**: Investigate why some individuals experience repeated homelessness.
- **Effective Services**: Identify key services that prevent homelessness among prison leavers and reduce reoffending.
- **Role of Drug Treatment**: Assess how drug treatment services contribute to preventing homelessness.

Back to **Community Sentence Treatment Requirements**



Public Engagement and Data Ethics

Public Engagement and Data Ethics

Public & Data Subject Engagement

- **Engage** with **data stakeholders** to gather **feedback** on delivering **impactful outcomes**.
- Collaborate with **trusted** intermediary organizations (e.g. Britain Thinks) for **public engagement**.
- Gain insights into **stakeholder attitudes** toward BOLD's data usage and activities.

Information Governance & Data Ethics

- Partnered with the **Centre for Data Ethics & Innovation,** who are working with us to create a **'Data Ethics Playbook'.**

AI for Linked Data

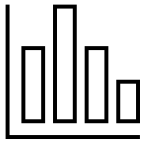
AI has the potential to unlock a **wealth of information** from **text data** in government

Free text data

A huge amount of **free text** data is available to the government.

Large Language Models

Large Language Models can extract **structured** information and **improve operational tools**.



Insights and Tools

This can **unlock insights** and **improve services** for the **vulnerable**.

Data to tackle these **issues** may exists in a department that does not have a **remit over solving them**

25%

of people leaving custody are released without access to suitable housing.

65%

of people leaving custody are not adequately picked up by community-based treatment programmes.

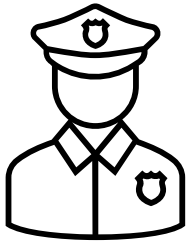
AI can **unlock** that **vital information**

Ministry of Justice **free text**

Extract **structured data** on **health, housing**

Insights shared with **DHSC** and **MHCLG**

Accessing **support** and **information** for **victims** can be **complex** and **difficult** to **understand**



29%

of police investigations are closed through victim attrition.

AI tools have the potential to help victims **navigate** and **understand** the sea of complex information

Victims Code

New digital tools

Empowering victims
by **breaking down barriers**
to **information access**

Cross-Government Collaboration:
Breaking down silos allows us to work together, share data, and deliver more effective public services.

AI as an Enabler:
AI transforms data into insights and powers new digital tools.

A Shared Vision:
We can achieve better outcomes for every citizen by making government greater than the sum of it’s parts.

Thank you.

Feel free to contact me at tom.oconnor@justice.gov.uk