SCALING THE IMPACT OF THE OPEN REFERRAL STANDARD
Executive summary (1/3)

This report finds that Open Referral UK is an open data standard that is well designed, documented and governed with an active international community and a growing number of supporters in the United Kingdom.

It has been endorsed by the Cabinet Office’s Data Standards Authority, actively encouraged by a Department for Education initiative, adopted by Local Authorities, NHS Integrated Care Boards, the ‘Third sector’ and a range of technology providers.

In fact the Standard can be considered to be on a positive trajectory regardless of intervention but the strong foundations established offer an opportunity to implement recommendations given here for accelerating adoption with the goal of realising the fuller benefits of the Standard earlier within Local Authorities and beyond.

This work identified consistent barriers to the wider adoption of the Standard and unlocking those benefits but has identified six recommendations that will mitigate those barriers and clear the path to wider adoption.
These recommendations are available in detail but in summary they are:

1. Commit to funding the Open Referral UK Cross-Government Advisory Group – including secretariat – for a period of three years
2. Endorse, support and maintain the Open Referral UK Benefits model
3. Run a multi-channel promotional campaign to educate different audiences on the benefits of Open Referral UK
4. Incentivise Local Authority adoption of the Standard
5. Define, test and support compliance with the Standard
6. Monitor and evaluate adoption the Standard

Each recommendation is elaborated upon and evidenced below including recommended tactics. An underpinning assumption of the recommendations is that the Department for Levelling Up, Housing and Communities’ Local Digital team will provide the impetus and coordination of initial activity but that delivery of these recommendations, and any future activity, would be overseen by the Secretariat recommended and governance and assurance provided on behalf of the Department by the recommended Advisory Group.
Introduction

Open Referral UK (ORUK or the Standard) was established as a standard for the interchange of open data on services following recommendations by Local Digital funded Discovery work. While great strides have moved this work in the direction of mainstream use, there remains a gap between current adoption of the Standard, and the impact that it could achieve with some further work to ensure it achieves ‘tipping point’.

This project, therefore, aimed to understand the gap that remains between the possible impact of Open Referral UK (ORUK), and the sector’s ability to realise it.
1) It aims to understand and communicate the full range of potential benefits of ORUK for the public at large, and for individual organisations across the public, community and voluntary and third sectors. E.g.

- improved publicity and engagement with local government and between sectors to achieve better signposting of existing services and knowledge of their benefits
- widespread reduction in resident demand for social care information
- lower directories maintenance costs
- better ability to understand the range of and plan for service provision nationally.

2) It also aims to identify and test the incentives and other work required to realise these benefits. This could include:

- Funding to facilitate easier adoption
- Creating tools to help implement the Standard (some of which have been designed, but need development to be nationally reusable)
- Centralised services prescribing the Standard
- Improved oversight and enforcement of the central government mandate to apply the Standard
- Mandate of the Standard in local government
- Helping councils understand the business case for the Standard
Background

Since ORUK was established as a standard for the interchange of open data on services following recommendations by LocalDigital funded Discovery work in 2019 there has been a series of projects and interventions that have maintained a steady momentum in the awareness and adoption of the Standard.

The Department for Digital Culture Media and Sport (as was) funded the Local Government Association (LGA) and iStandUK to precisely define a version of the Standard suitable for sharing services data in the UK and this was piloted by three councils in a project to identify services that might reduce loneliness.

Subsequently Buckinghamshire Council implemented the Standard for a Family Information Services directory and a LocalDigital Beta project documented the Standard, case studies and basic guidance on that implementation.
In March 2022 the Cabinet Office Data Standards Authority endorsed the Standard for use by Government departments and the Department for Education (DfE) Family Hubs programme is currently endorsing taking an ORUK-compliant feed from councils to update its data on services to which families can be referred. The Department for Work and Pensions has maintained an interest since work identified an analogous need to intake details of services from councils that will help people become work-ready. These councils have implemented a live ORUK feed of their services:

- Bristol
- Buckinghamshire
- Cumbria (as a LocalGov Drupal module)
- Elmbridge
- Hull
- North Lancashire
- Pennine Lancashire councils
- Southampton
Greenwich is running a Local Digital project to implement the Standard via open source software. A group of councils is following this work with a view to adopting the software.

The Standard is supported by a number of commercial and open source products and suppliers including Etch, neontribe, Placecube, Public Partnerships, LocalGovDrupal and TPXimpact. Additionally other suppliers, including Idox and Ayup, have indicated compliance with the Standard is on their roadmaps.
Barriers to adoption

Initial desk research and a broad range of interviews with stakeholders and interested parties identified 10 clear trends when it came to barriers to adoption of the Standard.

1. ORUK benefits are seen as long term and non-cashable when Local Authorities are seeking clear cuts
2. Lack of awareness among Senior Leadership Teams prevents ORUK scaling
3. Low awareness throughout Local Authorities reduces likelihood that ORUK compliance will be included in ITTs for contract renewals
4. ORUK adoption needs to reach a regional tipping point before many benefits can be realised
5. Local Digital Declaration is not a sufficient driver of change.
6. Scaled adoption requires a committed coalition of Central Government, NHS and other national organisations to reassure those looking to engage with the Standard.

7. Local Authority silos and competing priorities mean adoption can often only be driven from [very] senior leaders.

8. Understanding of interoperability (and other benefits) is inconsistent.

9. Definitions of what constitutes a directory differ, which creates confusion.

10. Some organisations believe they own directory data, so they can recoup the costs of maintaining it.

11. Data sharing relies on trusting data quality.
Broader opportunities

Service directories have been described as “a canonical register of all the ways needs can be met” thereby enabling referrals to any service in the public, private or third sector. Self referral is traditionally achieved by an online directory web page that can be filtered and searched, but a feed of services data is increasingly being used in more sophisticated ways such as:

- Feeding small lists of relevant services into the content of topic-based advice pages
- Passing service information into social prescribing “referrals” software to avoid rekeying
- Powering natural language enquiries about services from text or voice interfaces

Additionally while much of the narrative to date has been focused on the social prescribing possibilities there is a much wider range of ‘services’ with user needs that ORUK can support, including libraries and culture, sport and leisure, waste and recycling and even things like public toilets or car parks.
Recommendations

1. Commit to funding the Open Referral UK Cross-Government Advisory Group – including secretariat – for a period of three years.
2. Articulate the benefits
3. Run a multi-channel promotional campaign to educate different audiences on the benefits of Open Referral UK
4. Incentivise local authority adoption
5. Define, test and support compliance
6. Monitor and evaluate adoption
1. Commit to funding the Open Referral UK Cross-Government Advisory Group - including secretariat - for a period of three years

A commitment from Central Government, spearheaded by Department for Levelling Up, Housing and Communities (DLUHC), is required to provide clear, broad endorsement of the Standard sufficient to satisfy Local Authorities (and others) that ORUK is supported and sustainable, sufficient for them to invest in their own adoption of the standard.

The Advisory Group should provide governance and assurance in relation to the delivery of the following Recommendations in this report.

There is precedent for this Group as the Open Data Institute has previously convened a roundtable discussion (20th April 2023) which included representatives of a number of key stakeholder organisations including DLUHC itself and the Cabinet Office, Department for Education (DfE), Ofsted, the Local Government Association, Essex County Council, NHS England, Department for Works and Pensions and more.
Ambitions to maintain this as a standing group were stymied by lack of funding and support but draft Terms of Reference for an Open Referral UK Adoption Group were discussed and agreed at a less representative follow up meeting (22nd September 2023).

This Group will also provide a coordination point for supporting the benefits realisation of the Standard. As Simon Dickinson (an adviser to both Lancashire County Council and to the Lancashire and South Cumbria ICB) said:

“...the value [of the standard] is as a key building block for working across a ‘place’ to keep people safe, healthy and happy. DLUHC is best placed to own the concept of ‘place’ and to coordinate work which needs to involve other sectors such as the NHS, primary care, Education, Police, Ambulance, Fire & Rescue and the third sector”.
This Group should actively promote ORUK as an integral part of an infrastructure that supports services around the idea of ‘place’. While DLUHC is best served in convening this Group we recommend that the Chair can, and should, pass amongst members periodically.

Importantly this Group should seek a role within the existing governance structure of the international Open Referral initiative rather than provide a parallel UK data institute.

A parallel approach would risk fracturing the community and minimising the benefits of endorsing a widely adopted and evolving international standard.

Open Referral (International) is supported by the UK based Open Data Services Co-operative in a number of aspects of its work demonstrating there should be little issue in arranging a mutually beneficial relationship within the existing organisational design.
1.1 The Secretariat

**Insight:** An additional element of this commitment must be the installation of a small secretariat commissioned to not only support the Advisory Group but to coordinate the delivery of the other Recommendations outlined in this report – for which the Advisory Group should provide governance and assurance. This secretariat should also be given the objective to identify and implement a sustainable funding model that does not rely on continuing DLUHC support by 2026 while also expanding membership of the Advisory Group beyond central government to include insights from health, social care, voluntary charity services.

The existing, dormant, Group has a currently unfunded relationship with the Open Data Institute (ODI) who provide similar services for the OpenActive data standard on behalf of Sport England. Our work has identified no preference on whether re engaging with the ODI, expanding the role of the Open Data Services Co–op or entering into an open tender process for the secretariat team is the most appropriate path forward only that this support is required for the success of the other Recommendations.

1.2 Supplier sub group

**Insight:** ‘Supplier’, whether providing commercial or open source products, endorsement and engagement with ORUK is vital to the success of any adoption strategy. The supplier ecosystem that is most aligned with ORUK use has already demonstrated an appetite for greater engagement with the governance and direction of the Standard and has demonstrated support for the ambitions for the initiative.

Providing a forum for ‘Supplier’ engagement with any future Adoption strategy and providing closer ties to the Open Referral International initiative will strengthen relationships and provide an opportunity to influence product roadmaps and promotion at source.
2. Articulate the benefits

This recommendation helps to demonstrate the discrete and wider benefits is imperative in order to help drive adoption of ORUK within Local Authorities and other organisations. This will help raise awareness of the standard, as well as helping evangelists within organisations build a business case to senior leaders and service owners who have less of a technical background or understanding of data standards.

2.1 Make the case for Open Referral UK

Different stakeholders will have different priorities, and a compelling case needs to be built to help bring people on the journey. Existing success stories have been driven by technical people with an understanding of ORUK and community standards working with service owners who are looking to improve how they operate. Rightly, the service owner is focused on finding better outcomes for their residents and staff. Explaining how ORUK can play a meaningful role in this will be critical.
Greater levels of adoption unlock further benefits for Local Authorities, service providers, and residents. Helping foster regional critical mass by working with neighbouring authorities will help demonstrate what is possible across the full range of benefits outlined below.

Whilst this project’s scope is to understand how to drive adoption of ORUK within Local Authorities, the benefits of using the Standard to drive a modern approach to service data go far beyond councils themselves. These cross-government benefits will be explored by the Cross-Government Advisory Group with a view to progressing complementary work in other parts of the public sector.

### 2.2 Outline of the Local Authority benefits case

Our model details how a modern approach to service data through the use of ORUK can help Local Authorities and third parties save money through reduced administration, and offer opportunities for improved provision of community services, and potentially reduce overall spend on software for multiple directories.
Additional benefits are unlocked when a critical mass of adoption is achieved. Large service providers will only have to update one data feed, and Local Authorities will be able to share data feeds with neighbouring councils to serve residents on the border of localities more relevant information.

Finally, there is also a compunction on Local Authorities to provide central government with information. The administration of this can be reduced by using a data standard such as ORUK. The more national bodies adopt this, the greater the benefit to Local Authorities. Shared data feeds would also enable national information to be shared directly with the Local Authority.
2.3 Explanation of Local Authority structures and their role in linking universal services

Tier 1 Local Authorities have a responsibility across numerous areas to link residents with services. These include Adult social care, SEND Local offer and Children’s social care. They also have an operational need to update residents about the broad range of other services they provide. In reality, there are thousands of different services from categories such as Leisure and Culture, Health, Social Care, Housing, Schools and Education, Community Safety, Volunteering, Housing, SEND, Advice and Benefits, Early Years, Environmental, Planning, Transport, and Business and Employment.

The needs of residents and service users are broad, from new parents looking for advice on child care, a person looking for information to avoid homelessness, through to information about clubs that reduce social isolation.
The services they provide range from high to low acuity, and they play an important role in helping residents find universal / community services that support them to address their needs. For example, a resident can approach a Local Authority with a request for help (e.g. mental health support). The “Front Door” will triage the request. If it does not meet the threshold of further assessment, an important follow up will be to direct the resident to another organisation who may be able to help and meet the individual’s needs.
Local Authorities received over 2 million requests for help in 2021/22 for their Adult Social care services (which does not cover people consulting the website). Of these, around 700k were referred to universal or community services, with another 660k receiving no support. Even a small improvement in the efficacy of these referrals can make a material difference in people accessing help at an early stage.

Councils play an important role, both in facilitating public health social prescribing, and through directly linking residents with community services. This provides cost savings through early intervention, improves health and wellbeing outcomes for residents, and reduces pressures on frontline services. The demand for long term social care is growing, and the ability to adequately meet this demand is declining. Better access to community and voluntary support can help fill this gap, and Open Referral can play a small but meaningful role in improving this.

Local government’s role in linking residents with community services has been evidenced by the LGA (e.g. how to help residents suffering with loneliness), but we have heard consistently that existing service data is either not updated, or costly to up to date by Local Authorities and service providers. This causes inefficiencies, and has negative consequences for staff and residents who need assistance. We have demonstrated some examples here.
2.4 Estimated benefits of Open Referral UK

We have estimated the benefits of adopting a modern service directory to Local Authorities.

The logic behind the model is based on a Local Authority moving from a legacy approach to managing their service data (e.g. different service teams managing separate internal and external directories, often static, often quickly out of date) to a modern approach utilising ORUK to manage service data. Initial focus has been on the administrative savings to Local Authorities, but we have also included reference to the scale of the challenge and importance of the role that Local Authorities play in linking residents with community services.
● Service data is now consistent, and a data custodian (typically an information officer, business support officer, or a professional such as a social care worker who is tasked with updating records) spends significantly less time managing data.

● We have estimated that a data custodian can free up 15% of their time through standardising their data, and that they have a fully loaded cost (salary, pension, holiday, etc.) of £42,980. We have assumed an average of 1-1.5 Data Custodians across 6 areas of service (Public Health, Family Information Services, Adult Social Care, SEND, Disability Support, and Other). We believe that the actual amount of time spent managing service data may be higher, and that this should be part of the measurement and evaluation process for the next phase.

● In total, time savings for custodians is estimated at £5.8m–£8.7m per year across all 151 local authorities with a duty to manage these services. This represents the total opportunity savings, and this will be lower in Local Authorities who are not updating service directories due to financial constraints.

● For comparison, Snook estimated potential savings of £5.8–£10.7m per year thanks to reduced data custodian FTEs.
There are also meaningful time savings for frontline staff whose job entails linking residents with community services. Typically these are community workers (whose work entails a high degree of referring), Front Door social workers (who spend significant amounts of time triaging and directing residents to formal care, community care, or other avenues), and other social workers, who spend more time on fewer residents whose cases they are working on, but who will recommend additional support services where they help meet an individual’s need.

We estimate that there are 4.0k community support workers (£37.9k full cost) spending 25% of their time looking for services, 2.1k front door staff (10–15 FTE per LA, 20% of their time, £48k cost), and 20.4k other social workers (5% of time, £69k cost). This total cost of time being spent is £124–£170m across all Local Authorities. Not all of this time will be saved as staff use their own resources and time will still be spent searching regardless of the options available, but there is opportunity for optimising these referrals. Even a 10% saving is significant.
According to 2021/22 statistics, in Adult Social Care alone there were 2.0m new requests for help from Local Authorities by residents. Of these, 0.6m had no services, and 0.5m referred to universal services. Saving time dealing with (and improving the efficacy of) these referrals is a meaningful opportunity.

Beyond this, there are many low-level requests that are not necessarily tracked. For example, the average Local Authority dealt with c. 8.2k family information services non-digital contacts per month (via a 2016 survey). Extrapolated across all Local Authorities and the c. 17 different services offered by those Local Authorities, and that equates to over 4.4m 'low level' contacts per year – a huge administrative burden that could be improved via a modern approach to data.
Due to historically fragmented procurement, different service areas often procure different suppliers to manage their external directories.

By consolidating to one supplier Snook estimated potential savings of £6.1m across all Upper Tier Local Authorities (based on 10% saving).
For low acuity / need requests, a digital directory provides helpful resources for people looking for services.

Lambeth Council’s adult social care team had (on one date) 447 emails expecting response, received 1500 emails a month, and an average of 31% of telephone calls unanswered.

Through a tactical approach to shifting demand to the website (and other operational tactics), Lambeth decreased unanswered calls to 14.5%, and expect to save £500k per year by shifting demand away from primary care. This approach did not include ORUK, but it demonstrates the scale of the opportunity for Local Authorities who can modernise their approach to digital front doors – exactly the goal of Open Referral.

Birmingham City Council (one of the largest local authorities) had 67k unique visitors to their SEND directory in 2022.

Taking a modern, standardised approach to service data has benefits for a single Local Authority, but there is additional benefit unlocked when several Local Authorities adopt the same standard (such as ORUK).
Digital Front Door channel shift

- Adoption by multiple Local Authorities across the country will make it simpler for larger third sector organisations that operate services across a number of councils. If these organisations use a single data feed they will reduce the admin required to update multiple directories.

- For example, in Wales there is a centralised community services website. This replaced 26 separate authority directories, simplifying the process for national service providers. Dewis Cymru (the programme) estimates there are 900 national resources, and 200 national information pages available to residents and professionals. Yearly cost for the programme is c. £88k.

- Adoption by neighbouring authorities also unlocks potential benefits for cross-boundary service linkage. Currently Local Authorities only present data and services available within their locality. For people on the edge of that locality, they would be better served by being provided cross-boundary services closer to them geographically.
We have talked about the administrative benefits of a standardised approach to community service data, but as important is the improvement of linking residents with community services. There is undoubtedly a challenge in isolating the cash benefits of a community data standard due to the breadth of services offered, and the counterfactual nature of many of these interventions (e.g. isolating the value of someone volunteering, or understanding how finding a sports team reduced someone’s long term health). However, there is clear social value in the activities enhanced by ORUK, with Local Authorities playing a small but meaningful role in this chain of service provision.
As discussed above, Local Authorities deal with 5m+ contacts and requests for information and help per year.

Linking residents with community services can alleviate pressure on frontline council and local NHS services.

Out-of-date information means that people miss out on accessing services, either through inaccurate online information or Local Authority staff not having the information to link the resident with the right service. This is difficult to quantify, but we have heard consistently that this is happening, and SEND Local Offer surveys.

Early intervention has also been proven to be extremely cost effective in reducing pressures on NHS [Early Intervention examples]

There are numerous examples of social prescribing, and we heard examples of how this links with local authorities:

- "We know an OR database can improve health inequality...it comes before a GP appointment and phoning 111...so it saves money down the line." VCSE directory owner.
2.5 Risks and challenges in defining the narrative

Spreading the word beyond the community already aware of ORUK is a key challenge. Suppliers of directory software will play a vital role in both spreading awareness and increasing adoption. Hence there is a need to educate Local Authorities in ensuring a requirement for ORUK compliance is built into their procurement processes.

It is also important to acknowledge the challenge of maintaining the service data and that this is properly specified and resourced to make adoption a success.

Helping early adopters succeed, and then telling people about those successes was raised as something for the next phase of work to focus on.
2.6 DLUHC should endorse and further test the Benefits Model

To ensure that the benefits model is validated by Local Authorities, DLUHC should fully endorse the model and its development going forward.

The aim of the benefits model is to show the return-on-investment of ORUK adoption, but this can only be fully realised if Local Authorities are encouraged to validate the model by giving feedback and submitting real data. We propose that funding is conditional on making available data on: current maintenance of service directories, the implementation of new directories, and proposed maintenance of the new directories. This is vital to ensure the benefits model is tested and fit-for-purpose.

We understand that any reporting requirements should not add extra burden to Local Authorities. Thus, we recommend a light touch approach to be scoped out, with clear guidance on what information is needed beyond that which can be read by automatic means.
"We need to change the conversation to being more tactical rather than strategic to demonstrate how OR works and build the business case." Local Authority service designer.

"Need some modelling to understand what adoption means locally - senior leaders need evidence of where savings can be made." Integrated Care Board (ICB) digital engagement director.
3. Run a multi-channel promotional campaign to educate different audiences on the benefits of Open Referral UK

A programme of events, webinars, and other online resources should be implemented, tailored to different audiences. This campaign should aim to promote the benefits of ORUK, offer advice for adoption, and embed ORUK as the official government data standard going forward.
3.1 Promote the benefits of ORUK

A key finding from our research was the low awareness among senior leaders of the benefits of adopting ORUK data standards. We propose that without increased understanding at senior leadership level of how open data standards can help to improve outcomes and cut costs, there will be minimal impetus to adopt. We found that improving data standards is often part of a Local Authority’s long-term strategy, but many said it was ‘an ambition, not a priority’.

Thus, to drive cultural change from the top down, DLUHC should fund a campaign to promote the benefits of ORUK in terms that senior leaders will understand.
3.2 A pro-active targeted campaign

Our research highlighted several ways in which awareness of ORUK and its benefits can be increased:

1. Events - a programme of online and in-person campaigns designed to educate a variety of target audiences on how ORUK can help Local Authorities meet specific business challenges going forward. Provision would need to be made for an ORUK expert to attend these events.
2. Benefits model (see Recommendation 2)
3. Case studies - examples of who’s adopted, how they’ve done it, benefits and key learnings
4. Playbook – a best practice guide for managing the adoption process
6. Costs calculator – practical tool to show potential costs / savings from OR adoption.

Evidence from research:

“Director level is where you can get the most change done - but some have little bandwidth for it...which is why the educational piece is so important.” LA digital programme lead

“I had to learn about it [ORUK] but we have a good digital team and adopting OR was aligned with our strategy around sharing data across the organisation.” Early adopting LA business change director.
3.3 Promotional strategy aligns with other recommendations

Communications from official bodies including DLUHC and other members of the Cross-Government Advisory group (see Recommendation 1) will increase visibility of the message. Likewise more communication by DfE of its adoption of ORUK will increase knowledge of the Standard and confidence in its adoption.

Work to “Publicise compliant feeds and suppliers” (see 5.2) will demonstrate adoption. It will exploit suppliers’ own marketing that brings attention to their compliance with the standard indicating their technical competence.

Our work has exposed, somewhat by accident, directories that purport to use the ORUK standard but are not widely known or featured on the ORUK dashboard. Validating and publicising such directories will show a larger degree of adoption and so encourage more adopters.
3.4 The problems it addresses

Primarily tasked with providing better services and outcomes to citizens, senior leaders and service directors tend not to be technical people. They are unlikely to have a detailed understanding of how better data standards can help to address specific business problems. For example, the ability to collect data once and share it in a consistent, accessible format creates internal efficiencies, as well as providing a better customer experience.

This disconnect can cause data strategy to be a low priority in challenging financial times. By promoting ORUK adoption and how it can help solve key business problems, we can make what is often thought of as an ambition, can become a higher priority.

Evidence from research:

“Open Referral is an ambition, not a priority.”
Local Authority service designer

“ORUK adoption needs an SRO who can influence across the board – got to work top down and bottom up.” ICB digital director
In addition to a lack of understanding of the benefits of ORUK, we found there was a perception that potential benefits are long-term and intangible. This long-term view of any benefits, and any potential cost savings, reinforces the prevalent attitude that ORUK is low priority and a ‘nice-to-have’.

We propose that if the benefits can be demonstrated in a more tangible way, with evidence of cost efficiencies to be made, the case for adopting ORUK will be stronger. Senior decision makers armed with actionable intelligence on cost savings and better citizen outcomes will be empowered to make improving data standards a realistic, high priority objective.

“Budgets are tighter in Local Authorities now, and upgrading software to be OR compliant is a direct outgoing. The cost benefits might not land straight away so there’s a sense of burden there.” Software supplier

“Even with a robust business case, we’d struggle to get it done because the financial motivation wasn’t there.” NHS product manager.
Long-term understanding of benefits

There is a long cycle of adoption which involves:

- Growing coverage from commissioned services to voluntary and hyperlocal services
- Setting up mechanisms that increase trust in the data
- Expanding from a small place to a wider area
- Adjusting to the re-procurement cycles for software and commissioned community services

We need to explain the benefits at each stage and how to move through this cycle.
The relative success of early ORUK adoption in Local Authorities and ICBs has created a community of experienced practitioners from which others can learn. We often found that people simply needed help with understanding specific aspects of ORUK adoption, whether that is getting buy-in or data migration. Thus, alongside campaigns to improve awareness, to help others succeed we propose a programme of practical advice, guidance, case studies etc from those that have been there and done it.

“Showcase who’s done it [OR] well, how they’ve done it – the educational piece is really important.” Local Authority digital programme director

“A logistical blueprint for implementation, taxonomies etc would help, so we aren’t starting from scratch.” Local Authority data manager
4. Incentivise local authority adoption

We recommend making a payment to a fixed number of early adopter Local Authorities who provide an ORUK API feed which passes compliance tests defined in Recommendation “Define, Test and Support Compliance”.

We propose a payment that will incentivise adoption of the standard and help towards any software costs incurred from adding an API to existing directory databases. Where multiple councils use the same software supplier we expect the incentive to be adequate to cover supplier costs.

The incentive payment is to stimulate early adoption. We will define criteria for prioritising which councils receive payment including such factors as:

- Number and breadth of services to be included in the API feed
- Intention to share and combine data feeds across a “place” (a sub-region or locality served by services from multiple directories)
- Commitment from a supplier to make the API feed a core component of its product
- Service areas covered – concentrating on any common themes (such as housing and homelessness) where focussing effort may evidence significant impact
The incentives scheme will be aligned with priorities articulated by the Cross-Government Advisory Group and designed to complement any incentives from the DfE or elsewhere in government.

This recommendation is supported by the TPXimpact study on “Scaling Standards in Local Authorities” which referenced the Open Data Incentive scheme run by the LGA for the Cabinet Office in 2014/2015. That scheme resulted in approximately 80 Local Authorities publishing Comma Separated Values data in a predefined and validated structure for each of three themes (premises licences, planning and public toilets) - so almost 240 open feeds in total. Councils were paid £2,000 per dataset or £7,000 for all three. Councils made a commitment to publish on an ongoing basis but live feeds remain.
5. Define, test and support compliance

Early adopters of ORUK stress the importance of software that makes service data available complying strictly with the Standard. Local Authorities wanting to solve a problem don’t want to concern themselves with the mechanics of interoperability; they just need to know data can be exchanged reliably without rekeying. Hence we need a simple pass/fail test of compliance that is unambiguous to councils, their suppliers and others publishing or consuming data.

This recommendation is to gain consensus on what compliance means, to test for compliance and to support technical adopters in achieving it. It reduces councils’ need to deploy technical expertise when verifying software delivered. It removes the possibility of suppliers reporting compliance that is not strictly met.
5.1 Define compliance

The original version of ORUK used by LGA pilot councils and some others subsequently was supported by an online validator. A dashboard shows the degree of compliance by live feeds. Subsequent closer working with the OR international technical working group has:

- incorporated UK enhancements in the international standard
- defined a core Application Programming Interface (API) to match that used in the UK
- defined a “profiling” technique to state which data properties are needed for which use cases.

We will coordinate discussions between:

- Local Authority directory commissioners and their link workers
- Representatives from Education and Health
- Software suppliers
5.2 Validate and publicise compliant feeds and suppliers

Develop an online validator which will report any non-compliance. Where an organisation commissions a directory that publishes ORUK compliant data, we expect the validator to be used to prove compliance. An online dashboard will show compliant feeds. A scheme for “badging” compliant suppliers will be developed.

5.3 Provide developer support

A technical support service via the OR Forum, email and/or online chat will make available technical expertise to explain any non-compliance and advise developers on achieving compliance.
5.4 Participate in the international Open Referral community

Organisations involved in defining and supporting UK compliance will participate in the international forum, the monthly international Workgroup meetings and other events convened internationally. This will ensure UK interests are represented in any future amendments to the standard and that tooling developed outside the UK can be used within the UK where relevant.

We will contribute towards development of tools that support adoption but do not compete with the main commercial interests of UK suppliers. In return we will secure agreement that the no backwards incompatibility will be introduced in future versions affecting UK profiles without the consent of the UK Cross-Government Group.

We expect a lot of cross-fertilisation of ideas internationally because there are common challenges around issues such as: use of taxonomies; means of aggregating feeds, schema.org representations of the data, transformations from other formats.
6. Monitor and evaluate adoption

We recommend continual measurement and reporting of the level of adoption and its impact on outcomes.

6.1 Automated monitoring and reporting from open feeds

Software will be developed to read from ORUK feeds registered with the dashboard that is described under Recommendation 5. Reporting will be on the current state and on changes over time in:

- The number of ORUK feeds
- The number of services reported
● Completeness of data feeds indicating the extent to which optional (but useful) data such as service eligibility criteria is included
● Up-to-dateness of data measured by how recent the “last assured” and “last modified” property values are
● Use of different (and no) taxonomies and taxonomy terms
● Coverage of service areas in terms of the extent to which different types of service are available in an area
● Comparison of service area coverage against need as given by pre-existing metrics (e.g. on deprivation, mortality, prevalence of different types of illness) for an area. Such comparisons may initially only be available for local authority areas but they will illustrate an approach which can be used (ideally for smaller geographies) for assessing demand against supply of services. Hence funding can be redirected to services with the most impact.

The above reporting places no additional load on Local Authorities and their partners once ORUK feeds are available. Data gathering and analysis can be done centrally for DLHUC and by any third parties who want.

Where organisations receive funding from DLUHC, other government departments or individual councils we will recommend simple reporting be required by the funded organisations for measures that cannot be gathered by automated means. The intention will be to minimise any burden on organisations that is not directly related to service provision.
6.2 Measuring outcomes

Initial measures of outcomes will need to be qualitative until ORUK has sufficient coverage and reporting mechanisms are linked to other software – mainly referral systems used by link workers, primary care providers and others.

Measures of outcomes include:

- Improved referrals from more comprehensive and informative service data
- Reductions in duplication of effort
- Reliability of data – as indicated by changes in levels of trust
- Reuse of data by other organisations – indicated by the number and diversity of tools consuming the data
- Innovations resulting from use of the data

The ultimate goal will be to get the unique reference (the Universally Unique ID) associated with each service recorded against each case referral so that the efficacy of individual services and services of each type can be evaluated. We will apply target values to output metrics and qualitative goals for outcomes.
6.3 Evaluate adoption

Towards the end of the first year of an accelerated adoption programme, we will evaluate metrics and assess the achievements of the programme so far in terms of how much the targets and goals have been met. We will analyse any barriers encountered to achieving targets (e.g. we did not mandate populating data properties that experience shows are important).

6.4 Recommend future strategy

Following the above evaluations we will recommend a year-by-year future strategy which might include:

- Cease ongoing intervention and leave ORUK to operate as “business as usual” using established sustainable mechanisms
- Set stretch targets and provide further assistance to improve the coverage and quality of data feeds
- Expand cross-government working to build on local government’s investment in the Standard.
Conclusion

In conclusion this project asserts that the potential benefits from wider adoption of Open Referral UK are both sufficient and feasible to warrant investment and intervention from the Department. The Department for Levelling Up, Housing and Communities’ Local Digital team should lead or commission the convening of the reinstituted Advisory Group empowering that Group to decide the best route to engaging a Secretariat as soon as possible to take forward the recommendations.

Link to ‘how we got there’ our methodology slide deck ORUK – how we got there.
Appendix

APPENDIX A - Outputs from the “Define, test and support compliance” recommendation.

APPENDIX B – User Research

APPENDIX C – Additional extracts from Run a multi-channel promotional campaign to educate different audiences on the benefits of Open Referral UK recommendation.
Appendix A

Outputs from the “Define, test and support compliance” recommendation.

Outputs:

- A machine readable data structure represented by JavaScript Object Notation (JSON) classes
- A representation of the data structure expressed as an entity relation diagram
- A small set of RESTful API GET web methods defined according to the Government adopted OpenAPI standard and documented via Swagger – see recommendation of the OR international workgroup
- Optional extensions to the above to maintain consistency between organisations that choose to go beyond minimum compliance
- Online software:
  - An updated validator reporting errors where validation fails
  - An updated version of the current dashboard to show which compliant feeds are available from which organisations using which software suppliers (or inhouse developers)
Core minimum API web methods:

- A paginated list of services
- A paginated list of services at locations
- Full details of a given service

What compliance will mean:

- Providing an API feed open anonymously to all (optionally with throttling to control access rates)
- Provision of the core minimum set of API web methods
- API web method responses in the agreed structure with no limit on extra properties that don’t conflict with the standard
Appendix B

User Research

Our Approach

Extensive research has informed the recommendations in this document. ORUK involves a broad church of advocates, enthusiasts, experts, and novices in varying capacities. Thus, we have consulted a wide range of stakeholders and employed a variety of research techniques to gather quantitative (data, numbers etc) and qualitative (opinion, commentary) evidence. Link to Insight Deck.

The phases of research we have completed include:

- Synthesis of previous research
- Desk research
- Stakeholder interviews
- Benefits model data collection and analysis
- Survey
For the interviews, we spoke to a wide range of stakeholders in many different roles, organisations and levels of ORUK adoption / awareness, including:

**Roles:**

- Digital engagement directors
- Data managers
- Information managers
- Service designers
- Third sector Chief Executive Officers (CEOs)

**Organisations:**

- Local Authorities
- DfE
- Suppliers - both developers and integration experts
- ICBs / NHS
- VCS / third sector
Awareness:

- Adopters
- Non-adopters
- Currently considering

Please note: due to the scope and limited length of the project, we did not speak directly to any of the following:

- Citizens
- Referrers / link workers
- LA service commissioners
- LA senior leadership (CEO / COO etc)
- Other related organisations such Police, Judicial etc

However, where relevant we have included insights from previous research undertaken with these stakeholders. In some cases, we have also included quantitative data on directory usage from previous research.
Personas

The following personas have been created from the insights collected during the stakeholder interviews. They are designed to represent a number of contrasting ORUK user perspectives that emerged from our research. Though the information assigned to them is real, please note that these are fictional characters.

The four personas have been separated into three ORUK adopters and one non-adopter. Personas are an important asset for understanding the target audience for a product or service. They are not static, and can be altered according to any future research carried out.
Early adopters:

Gemma, VCS directory provider, OR advocate

1. **Background:**
   - Gemma runs a health and wellbeing charity, which includes a directory of services
   - The directory covers multiple Local Authorities
   - The charity is contracted by relevant Local Authorities to provide and maintain directory
   - She has worked in this area for years and is an advocate for social prescribing and the power of quality information to change lives for the better.

   In her words: “We’re a point of access for people to find information but we also connect people together...we call it a directory of relationships.”

2. **ORUK adoption context / behaviours:**
   - He was involved in early pilot to update directories and adopt open referral – has been aware of open data standards for years
   - She views their data as being open and in the public domain
   - Their USP is adding the human element to a digital tool – verifying information at the point of collection to ensure its integrity, followed by regular checks to maintain quality
3. Challenges:
   - High staff turnover in Local Authorities means that new commissioners might not understand the value of their directory
   - ICBs have more money and influence than Local Authorities, so are leading the way in improving data processes
   - Data migration – it’s a manual process with few short cuts
   - Service owner self registration is valuable but needs their human resource to ensure service record is tagged correctly

4. Needs:
   - Cooperation through regional engagement groups – collective approach is best as multiple parties are involved
   - Resources – ongoing maintenance of the information is key but this needs human beings

5. Key learnings:
   - Local Authorities should start small with a pilot project – then get consistent approach across the organisation

Final thought: “The key case for Open Referral is whether it can show how much time and money these services save clinician resources.”
User Story for ‘Gemma’

Value: regional engagement leader

“In her words: “We’re a point of access for people to find information but we also connect people together... we call it a directory of relationships.”

Background
Gemma runs a health and wellbeing charity, which includes a directory of services.
The directory covers multiple Local Authorities, and they are contracted by the NHS to manage and maintain it.
She has worked in this area for years and is an advocate for social prescribing and the power of providing accessible, quality information to change lives for the better.

ORUK adoption context/Behaviours
She was involved in early pilot to update directories and adopt open refer - she has been aware of open data standards for years.
She views their data as being open and in the public domain.
Their UPA is adding the human element to a digital tool - verifying information at the point of collection to ensure its integrity, followed by regular checks to maintain quality.

Challenges
High staff turnover in Local Authorities means that new staff members might not understand the value of their directory.
Integrated Care Boards (ICBs) have more money and influence than Local Authorities, so are leading the way in improving data processes.
Data migration - it’s a manual process with few short cuts.
Device owners’ self-registration is voluntary but needs human resource to ensure service record is tagged correctly.

Needs
Cooperation through regional engagement groups - collective approaches in best as multiple parties are involved.
Resources - ongoing maintenance of the information is key but this needs human linkage.

Key Learnings
Local Authorities should start small with a pilot project - then get consistent approach across the organisation.

Role: VOS directory provider
ORUK knowledge: advocate
Future contribution: regional engagement leader

Gemma
VOS directory provider

As a... third party directory provider
I want... systems in nearby LAs or other LA departments such as children’s services to adopt consistent data standards
So that... there are no disparities in data collection and thus we can consume this data into our directory more efficiently
Early adopters:

Heather, LA customer experience lead, ORUK adopter

1. **Background:**
   - Heather had no previous knowledge of ORUK before it became part of the Local Authority digital strategy
   - She’s focused on improving service directory user experience, using improved data structures to do this
   - Learnt about data standards from digital colleagues and agency partners as part of directory software contract renewal

   In her words: “The biggest selling point [of ORUK] is sharing data and the ability to build a suite of products and innovate.”

2. **ORUK adoption context / behaviours:**
   - Brought directories ownership ‘in house’ into digital team, to avoid siloed ownership by service teams
   - Approached ORUK adoption as a technical requirement to improve user experience across Local Authority digital services
   - Sold adoption to senior leaders as a vehicle to drive better directory data, and thus more effective social prescribing
3. **Challenges:**
   - Data migration from legacy directory structures to new ORUK schema – it’s a manual process with few shortcuts
   - Budgets are tight

4. **Needs:**
   - Software products to stay up-to-date with latest versions of ORUK
   - Community collaboration to drive the product forward, similar to LocalGov Drupal

5. **Key learnings:**
   - Data can be used more effectively when it’s in a more predictable, shareable format
User Story for "Heather"

Value: adoption case study

Role: Local Authority customer experience lead
ORUK knowledge: adopter
Future contribution: adoption case study

Background
Heather had no previous knowledge of ORUK before it became part of the Local Authority digital strategy. She’s focused on improving service directing user experiences, using improved data structures to do this. Leant about data standards from digital colleagues and agency partners as part of directory software contract renewal.

ORUK adoption context/Behaviours
Brought directory ownership into digital team, to avoid siloed ownership by service teams. Approached ORUK adoption as a foundational requirement to improve user experience across Local Authority digital services.

Challenges
Data migration from legacy directory structures to new OR scheme - it’s a manual process with few shortcuts.
Budgets are tight.

Needs
Softwares products to stay up-to-date with latest versions of ORUK.
Community collaboration to drive the product forward, similar to LocalGov Drupal.

Key Learnings
Data can be used more effectively when it’s in a more predictable, sharable format.

User: Local Authority Customer Lead

In her words:
"The biggest selling point [of ORUK] is sharing data and the ability to build a suite of products and innovate."

As a... Local Authority adopter responsible for harnessing long term benefits of ORUK.

I want... a community of ORUK practitioners and experts similar to LocalGov Drupal.

So that... we can share knowledge and learn from other ORUK compliant organisations on how to get the most out of ORUK and stay up to date with developments.
Early adopters:

Martin, Software supplier, ORUK specialist

1. **Background:**
   - Martin is commercial director at mid-sized software vendor
   - He’s been involved in development of off-the-shelf directory product since 2018
   - Regular contributor to industry events

   In his words: “If we all have a common currency we can work together more and it supports interoperability – that was the key, so that all systems could talk to each other.”

2. **ORUK adoption context / behaviours:**
   - Initially their product was not ORUK compliant
   - Catalyst to adopt was working on a Local Authority directory upgrade with other digital agencies who were pushing ORUK
   - Adoption makes commercial sense as it improves data quality and is the future
3. **Challenges:**
   - Tenders often don't include data standards
   - Senior council leaders that don’t listen or fail to grasp the benefits of ORUK
   - Adapting the product to ORUK and keeping it up to date

4. **Needs:**
   - Technical expertise to help review the product during development or when updating
   - Official certification for ORUK compliant products and services

5. **Key learnings:**
   - Cross government alignment will give the standard greater influence
User Story for ‘Martin’

Value: supplier working group

Role: software supplier
ORUK knowledge: specialist
Future contribution: supplier working group

Background
Martin is commercial director at a mid-sized software vendor. He’s been involved in development of off-the-shelf directing product since 2018. Regular contributor to industry events, forums and blogs.

ORUK adoption context/behaviours
Initially their product was not ORUK compliant. Delight to adopt was working on a Local Authority director group with other digital agencies who were pushing OR. Adoption makes commercial sense as it improves skills field and is the future.

Needs
Technical expertise to help realise the product during development or when updating.
Official certification for ORUK compliant products and services.

Challenges
Tenders often don’t include data standards. Better council leaders that don’t listen or fail to grasp the benefits of ORUK.
Adopting the product to ORUK and keeping it up to date.

Key Learnings
Digital government alignment will give the standard greater influence.

In his words:
“If we all have a common currency, we can work together more and it supports interoperability— that was the key, so that all systems could talk to each other.”

Martin
Software Supplier

As a... ORUK software supplier

I want... central government endorsement for OR and a certification programme for suppliers that meet the required standards.

So that... we can ensure our current product continues to meet the required standard, and the market is reassured that our product is a trusted solution.

Triage Impact
Non-adopters:

Grant, LA digital innovation lead, non-adopter

1. **Background:**
   - Grant has worked at a large metropolitan council for ten years, across two different roles in the digital team.
   - His main responsibility is finding ways to improve service delivery.
   - He has had some exposure to data standards during software tender processes but he’s mildly sceptical of the benefits and does not have technical knowledge.

   In his words: “Years ago there was a focus on open data, but Covid derailed that in favour of other essential projects like implementing MS 365.”

2. **Data landscape:**
   - Local Authority has inconsistent data quality across services areas with no central ownership.
   - Recent software renewals have had ORUK compliance on tender but not been implemented because of cost and other priorities.
   - Overlap between NHS and Local Authority provision of health service information, but NHS leading the way in terms of data maintenance.
3. **Challenges:**
   - Lack of joined up approach across multiple digital journeys (ICB and council directories) leads to poor user experience and duplicated data
   - Budget and internal Senior Leadership Team bandwidth for taking data improvements seriously
   - Service providers are unlikely to keep data up to date unless there are clear incentives

4. **Needs:**
   - Adoption needs to be light touch, low cost and straightforward to implement
   - Central government endorsement and guarantee that other data standards won’t be promoted or mandated in future

5. **Key learnings:**
   - Cross government alignment will give the standard greater influence

Final thought: “We need to change the conversation to being more tactical rather than strategic to demonstrate how ORUK works and build the business case for it.”
User Story for ‘Grant’

In his words:
"Years ago there was a focus on open data, but Covid revealed that in favour of other essential projects like implementing MS 365."

**Role:** Local Authority digital innovation lead  
**ORUK knowledge:** non-adopter  
**Future contribution:** event attendee

**Background**
Grant has worked at a large metropolitan council for ten years, across two different roles in the digital team.  
His main responsibility is finding ways to improve service delivery.  
He has had some exposure to data standards during software tender processes but he’s mid-way through adoption of the benefits and does not have technical knowledge.

**ORUK adoption context/Behaviours**
Local Authority has inconsistent data quality across services areas with no central ownership.  
Recent software renewals have had ORUK compliance on tender but not been implemented because of cost and other priorities.  
Overlap between NHS and Local Authority provision of health service information, but NHS leading the way in terms of data maintenance.

**Challenges**
Lack of joined-up approach across multiple digital journeys (IDR and council directories) leads to poor user experience and duplicated data.  
Budget and internal senior leadership: Teams bandwidth for taking data improvements actively.  
Service providers are unlikely to keep data up-to-date unless there are clear incentives.

**Needs**
Adoption needs to be light touch, low cost and straightforward to implement.  
Central government endorsement and guarantee that other data standards won’t be promoted or mandated in future.

**Key Learnings**
N/A

**Grant**
Local Authority Digital Innovation Lead

As a... digital leader considering ORUK adoption.

I want... clear stipulations from central government on the long term endorsement of ORUK as the official data standard.

So that... council leaders are reassured about the long term viability of adoption.
Appendix C

Additional extracts from Run a multi-channel promotional campaign to educate different audiences on the benefits of Open Referral UK recommendation:

Disconnected teams enable inconsistent data management

Siloed working was a common issue reported during our research. This can lead to an inconsistent approach to data standards and the provision of service information via misaligned systems, little incentive to update service directories, and concepts of data ownership.

The rise of digital departments with a user-centred design focus has helped to raise the importance of ORUK adoption. However, better awareness and promotion of ORUK benefits from senior leadership would help to drive the cultural change needed to make working as a single data ecosystem a strategic priority across the Local Authority.
Evidence from research:

1. “There’s no central team for data – everyone’s taking care of their own bit.” – Local Authority digital services manager
2. “Working in a partnership is harder than working in a silo.” Software supplier

**Education enables benefits to be seen holistically**

The issue of low data integrity and trust in service directories was a common theme from our research. If the entry point of the customer experience is poor then an adverse effect on down-the-line services uptake and better outcomes will be noticeable, both of which are common Local Authority strategic goals.

While many in the social prescribing landscape (service providers, Local Authorities and healthcare settings) are aware of this connection, a lack of focus on the underlying structural cause – data quality – is apparent. We propose that communication campaigns specifically designed to ‘join-the-dots’ between higher quality data enabling more social prescribing and better health outcomes, will ultimately help to alleviate pressure on public services.

Evidence from research:

1. ‘Better directories are enablers of early intervention’ Local Authority digital engagement lead“We know that an ORUK compliant database with accurate, searchable service information can improve health inequality. It comes before a doctor’s appointment and phoning 111 – so it saves money down the line.” Charity CEO
THANK YOU