

From: Greg Bloom, Open Referral Initiative

Subject: Broadening Public Engagement in the Federal Regulatory Process

Thank you for the opportunity to comment on this topic. In response, I'm pleased to provide this summary of recent progress toward the standardization of 'resource directory data' – i.e. information about the location and accessibility of health, human, and social services available to people in need.

While resource directory data may not have been what the authors of this request for information had in mind, it is essential public information that is critical for any perspective on the effectiveness of federal regulations in the deployment of resources for health, human, and social services to meet the needs of American citizens. In other words, before we can improve the ability to engage in deliberation about the design and accessibility of government-funded human services, we need to address the fact that Americans don't have equitable access to information about what services exist in the first place.

Below is a description of the challenges pertaining to accessibility of resource directory data, recent developments in the standardization thereof, and potential roles that federal agencies can play in promoting accessibility and reliability of information about services available to people in need.

The Problem: a landscape of fragmented silos

Information about the accessibility of health, human, and social services is constantly in flux. Shifts in funding, staff turnover, and other factors regularly change which services are available to whom, where and how they can be accessed. Nonprofit and government agencies are often under-resourced and overwhelmed, and it is often not a high priority for them to widely promote detailed information about their own services to the public.

There are many 'referral services' — such as call centers, resource directories, and web applications — that manually aggregate and maintain this information themselves, usually soliciting it through recurring outreach to service providers. The resulting service information landscape is redundant, fragmented, and siloed. As a result of this costly and ineffective status quo:

- **People in need** have difficulty discovering and accessing services that can help them live better lives.
- **Service providers** struggle to connect clients with other services that can help meet complex needs.
- **Decision-makers** are unable to gauge the effectiveness of programs at improving community health.
- **Innovators** are stymied by lack of access to data that could power valuable tools for any of the above.

The Opportunity: interoperability through standardization

Many have tried and failed to build 'one stop shop' solutions (i.e. 'centralized community resource clearinghouses') — and new efforts still emerge all the time. The scale of labor required to maintain this information is often too great for any one organization to accomplish itself. So these well-intentioned efforts end up causing more fragmentation and confusion.

However, if the many different kinds of information systems that connect people to services could all recognize a common data format, then **resource directory data could be published canonically, as standardized open data, to be simultaneously accessed and used in many ways by many systems.**

Our Progress: development of an industry standard for data exchange

In 2014, the Open Referral Initiative (<https://openreferral.org>) formed out of a series of dialogues among the Alliance of Information and Referral Systems, Google.org, Code for America, and a variety of resource referral software vendors in the fields of health, human, and social services.

Open Referral's objective was to establish a data exchange format that would enable interoperability among service directory information systems used by conventional call centers and emerging web apps, as well as search engines like Google, Yelp, etc.

The result of our efforts is the Human Services Data Specification (HSDS) and API protocols (HSDA), which are documented at <https://docs.openreferral.org>.

In November 2018, the Alliance of Information and Referral Systems (<http://airs.org>) formally endorsed HSDS as industry standards for resource data exchange. (Read more about this endorsement here: <https://openreferral.org/airs-recommends-open-referral-for-resource-database-interoperability/>)

HSDS is currently used by market leaders for both resource-referral call-center software ([such as iCarol](#)) as well as health-centered care-coordination software ([such as Healthify](#)). The United Way Worldwide's [National 211 data platform is using these protocols to publish directory data](#) as are many state and local 211 providers and other information-and-referral providers.

These protocols are also under adoption by a range of local governments ([such as New York City](#)) and philanthropic funders ([such as the Florida Bar Foundation](#)).

Open Referral's protocols for resource data exchange have also been recognized by the US Data Federation, under the General Services Administration (<https://federation.data.gov/>) and supported by HHS agencies such as the Administration for Community Living and Administration for Children and Families.

The Role for Government in promoting open standards and interoperability

We encourage federal agencies to leverage HSDS and associated API protocols as default, non-proprietary methods for the publication of resource data about the health, human, and social services available to people in need. There are several roles that government agencies might play in this regard.

First of all, government agencies can directly publish standardized open data about those services that are provided within their own remit. Some government agencies provide services directly. Many agencies also fund services through grants and contracts. In any such case, up-to-date machine-readable non-proprietary data should be made available to the public. By using this industry standard as a default format for publishing data about government services and publicly-funded services, the government can simultaneously promote interoperability and innovation — as well as transparency and accountability — across the fields of health, human, and social services.

Some federal agencies also produce directories of assorted services within their domains. Sometimes such resource directories are made available in PDFs or searchable websites. By ensuring that each such service directory is also available in a standardized, machine-readable format — ideally through a standardized API — government agencies can ensure their investment into such information products can yield even broader value, as such information can be interoperably accessed for reuse by an ecosystem of third-party intermediaries.

Government agencies also provide funding for the development of community-based infrastructure for care coordination. Through procurement policy, such funding could entail contractual requirements that any resource information that is aggregated and exchanged through related activities should be made available in a non-proprietary, machine-readable, industry-standard format.

The benefits of human service directory data standardization

Any of the above actions could enable cost savings, enhanced data quality, and improved service discovery and deliverability — across the many domains of health, human, and social services.

By making open, standardized resource directory data freely available as information infrastructure for use by referral providers, technology developers, and researchers and analysts, the government can greatly improve our collective capacities for innovation — from institutions like the HHS IDEA Lab to community-based hackathons across the country.

When standardized resource data is published in a predictably structured way on the web, it will also be easier for this information to be indexed and delivered to users directly by web engines like Google, Facebook, Yelp, etc.

Furthermore, this evolutionary step forward can enable new capacities for feedback collection and quality improvement across the field. Today, agencies often only collect data at periodic intervals — if at all — about the accessibility of services that they fund; however, service accessibility is constantly changing. By enabling standardized open access to canonical resource data across any given information channel, we can subsequently enable agencies to receive real-time feedback — about the accuracy of the data, and also about the quality of services — from those channels. These feedback loops can enable a much more accurate view of the service landscape over time.

Perhaps most importantly, these developments can make it easier to assess — and improve — the effectiveness of public investments in the health and well-being of children, families, and communities. As the industries of resource referral and care coordination shift from competitive silos to the aligned use of canonical data through open infrastructure, it will become possible for researchers and policy-makers to analyze data about communities' needs — and programs' effectiveness in meeting those needs — at a scale that was not previously possible. By enabling interoperable aggregation and analysis of 'usage data' such as search queries, and referral logs, we can generate insights into questions about which kinds of people are in need of which kinds of services — where the gaps are, and how service delivery might be made more efficient.

Broadening Public Engagement in Regulatory Process: Response to OMB

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Moving forward

Leadership from the Open Referral Initiative is available to provide guidance and support for implementation of new methods to publish standardized resource directory data. Open Referral can also support the development of demand-side 'use cases' to demonstrate value propositions through testing and evaluation, from across the thousands of organizations represented by members of our network. Thank you for your service.

Greg Bloom

Open Referral

bloom@openreferral.org