

Data Models for Vulnerability

| revision | on | by | notes |
|----------|------------|-------------------------|--|
| 1 | 11/03/2026 | Paul Davidson, SAVVI | Describing version 1.0.0 Baseline of the Concept Model and the Logical Model |
| 2 | 25/03/2026 | Paul Davidson, SAVVI | Improved Place Entity properties. Version 1.0.1 of the Logical Model |
| 3 | 15/06/2026 | Paul Davidson, SAVVI | Version 1.02 of the Logical Model. Registered Sex, and Gender, adjusted to use a locally agreed code list, rather than stipulating the allowed values as an enumeration. |

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About

This document proposes a Concept Model and a Logical Data Model, to find and support people who may be at risk of a vulnerability.

The models are designed to

- facilitate multi-agency data sharing and collaboration
- promote a componentised and reusable component architecture
- support lawful, ethical, and transparent use of data

This revision of the document presents the models as baselined at version 1.0.0

The models have been conceived by the SAVVI programme, and scrutinised and refined by the [Data Standards Authority](#) Vulnerability Working Group; both are explained later in the document.

Vulnerability defined

Public services increasingly recognise the importance of prevention; identifying people and households at risk early, and coordinating support before problems escalate.

However, services often operate in silos. Data is fragmented across organisations, legal interpretations vary, and local innovation is difficult to scale. As a result, people can fall through gaps between services, and prevention efforts are inconsistent.

The Concept Model defines Vulnerability as ...

The increased risk of a poor outcome.

That might include

- experiencing financial hardship
- being unsafe during adverse weather such as a flood
- a child not being ready to start school
- being economically inactive
- becoming homeless

These models are designed to facilitate early identification and smarter intervention by ...

- finding people who we otherwise don't know about, who may be at risk of a vulnerability
- assessing needs
- referring to support services
- reporting on outcomes and impact

The DSA Vulnerability Working Group

The [Data Standards Authority](#) (DSA) has established the [Vulnerability Working Group](#), as a cross government group, to bring forward

- Data Standards
- Terminologies

- Information Governance and Trust

... to encourage a framework for interoperability across organisations taking part in a Vulnerability initiative.

The working group has reviewed various examples of vulnerability initiatives, and taken the outputs of the SAVVI programme as a starting point. As the group has improved and refined the SAVVI work, the SAVVI programme has folded them back into its outputs.

With the proposed Data Standards now baselined at version 1.0.0, the working group will continue to develop them as it learns from testing and prototyping. The Government Digital Service encourages representation from across the UK public sector to participate.

The SAVVI Programme

SAVVI is a framework to enable early identification and smarter interventions, for vulnerable people. You can find out more about SAVVI at <https://www.savviuk.org>

[SAVVI](#), standing for ‘a **Scalable Approach to Vulnerability via Interoperability**’, is a programme hosted by [Tameside Council](#), developed by [iStandUK](#), and funded by the Ministry of Housing, Communities and Local Government (MHCLG) [Local Digital Fund](#).

SAVVI provides a practical framework to enable organisations to:

- identify people and households at increased risk of poor outcomes
- share and reuse existing data lawfully, ethically and transparently
- coordinate support across organisational boundaries
- avoid building single-use systems for each new priority

The SAVVI website has

- a five minute video on the [home page](#)
- [case studies](#) of examples of Vulnerability
- [the models](#) laid out in this document

Sharing Data for Vulnerability

Often, no single organisation has all the data that could indicate the risk of a vulnerability, and no single organisation has all the support offers that are relevant; so tackling a vulnerability requires multi-agency data sharing and collaboration. In particular

- matching up risk factors derived from across disparate organisations and datasets
- creating prioritised cohorts of people who may be at risk
- assessing needs and referring to a collection of support services
- consistent cross organisational reporting on outcomes

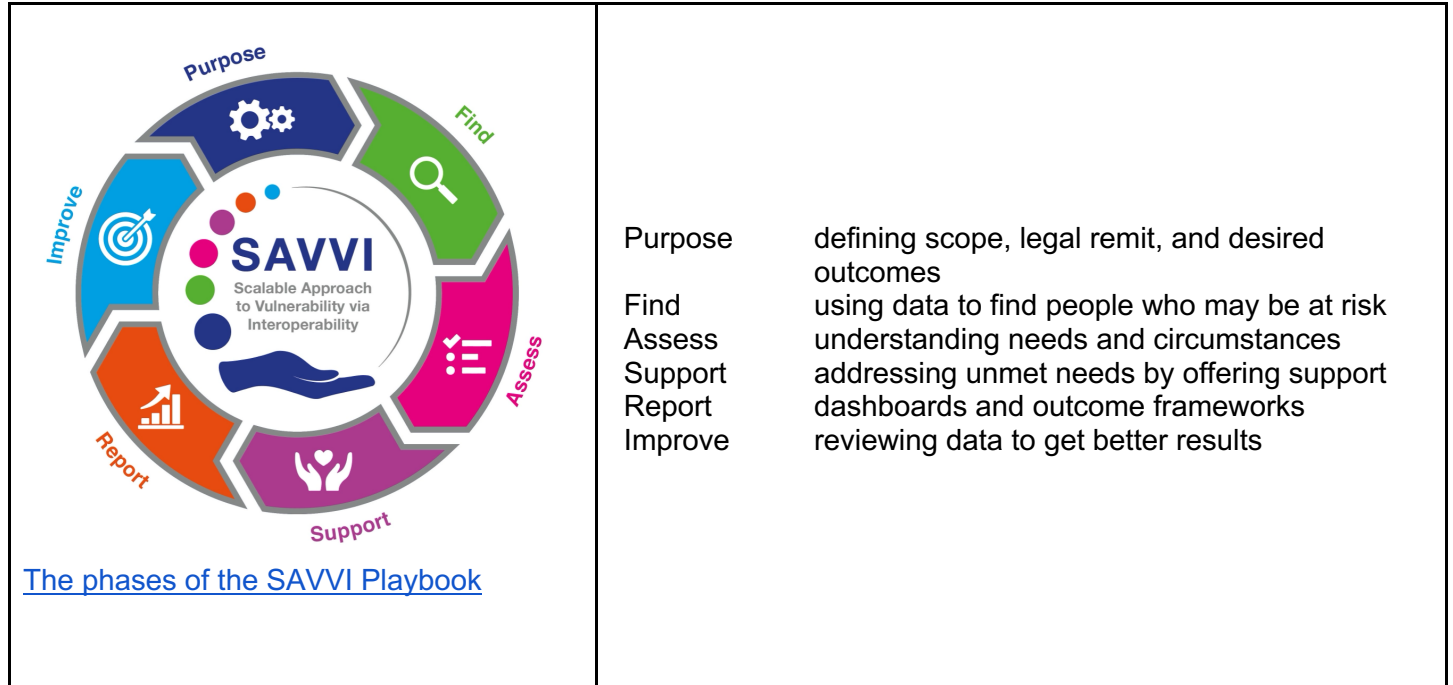
Privacy and Security needs to be built in so that

- only sufficient information is shared at each stage
- data sharing is lawful and ethical
- data handling is secure and accountable

A common repeatable process

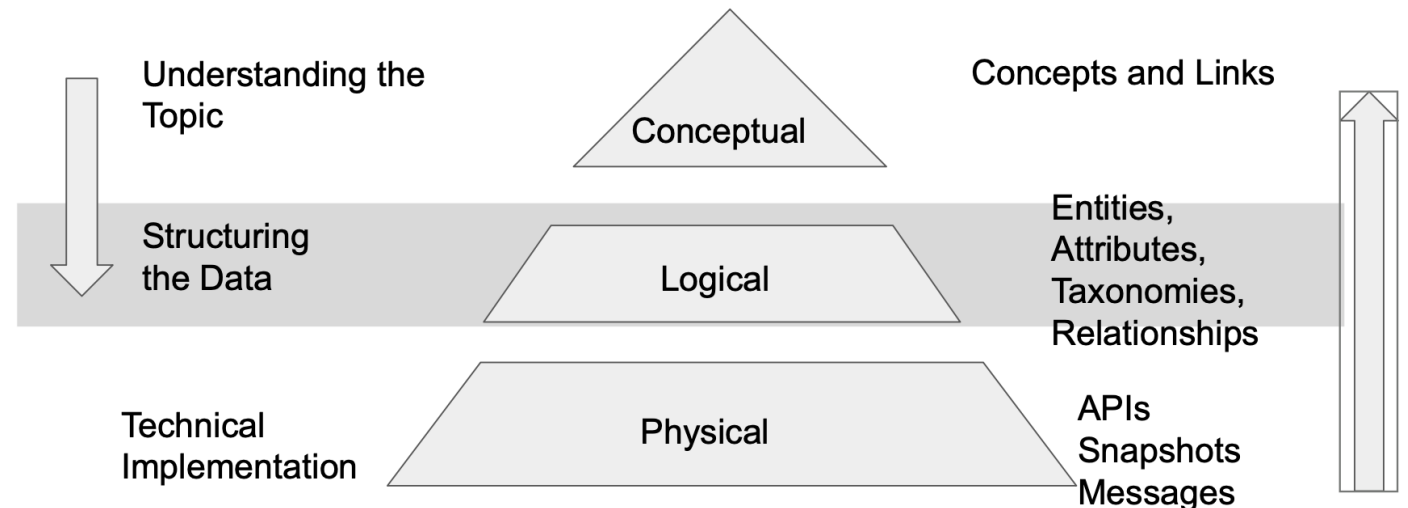
The data models have been designed to enable data to flow around a common process that can be applied to any vulnerability.

SAVVI defined the common process as ...



Modelling

The proposed data models are developed at three levels.



| | |
|----------------|---|
| Concept Model | Identifying Concepts and how they can be linked. Giving each a precise definition to establish a consistent language. |
| Logical Model | Defining data entities and structures as a 'menu' for transacting data. |
| Physical Model | Defining data sharing formats tuned to particular use cases |

The Concept Model

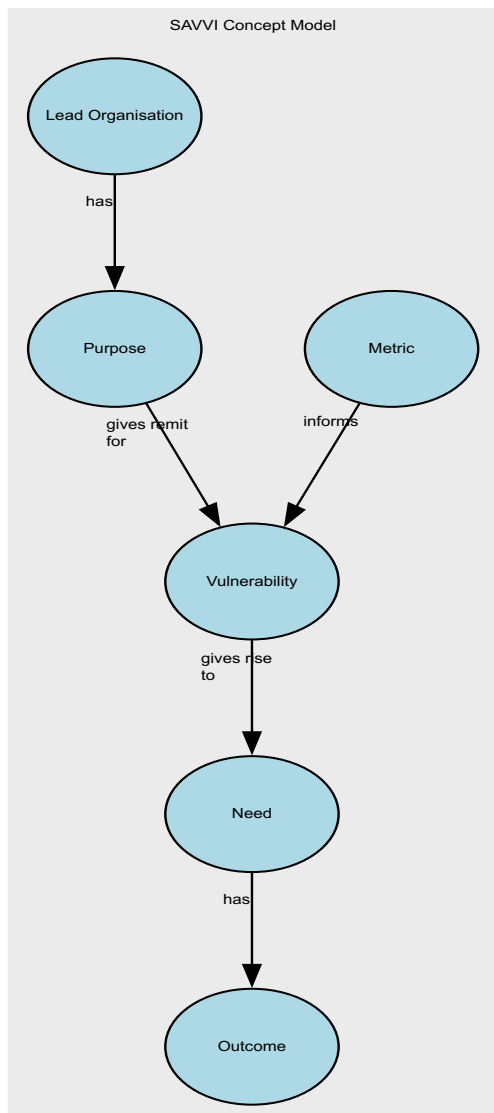
This document presents the Concepts from the Concept Model as they are introduced at each phase of the SAVVI Process, and then, shows the whole model. These views of the Concept Model are also shown at [the SAVVI website](#) together with various machine readable formats including

- [RDF Schema](#) (RDFS)
- [comma separated values](#) (CSV)

The Purpose phase

In the Purpose phase

- a LEAD-ORGANISATION will establish that it has a PURPOSE that gives it a remit to act on one or more VULNERABILITYs.
- where the PURPOSE gives the basis for data sharing and data reuse throughout the initiative.
- some METRICS may be used as statistics to demonstrate that each type of VULNERABILITY is an imperative, and which could subsequently be used to track the impact of the whole initiative.
- will set out types of unmet NEEDs, which, if addressed by smart interventions, could lead to improved OUTCOMES.



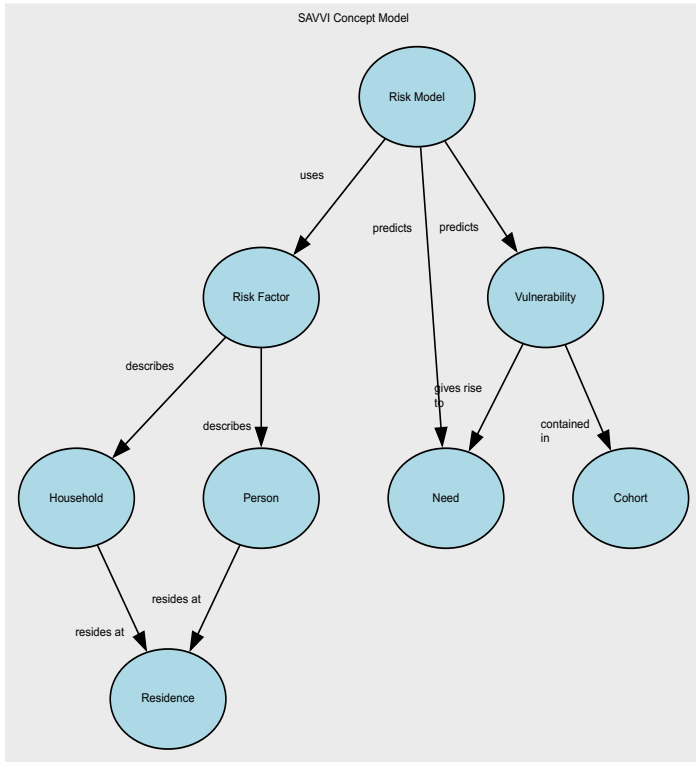
Concepts introduced in the Purpose phase

| | |
|-------------------|--|
| Lead Organisation | An organisation responsible for coordinating a vulnerability initiative, and with remit for the PURPOSE. |
| Metric | A statistic that evidences the imperative for a VULNERABILITY to be addressed. |
| Need | An unmet requirement of a Person or Household that can be addressed. |
| Outcome | A result that has been achieved by addressing the NEEDs of a Person or Household. |
| Purpose | The remit that an Organisation has to carry out an initiative covering one or more VULNERABILITYs. |
| Vulnerability | The increased risk of a poor outcome. |

The Find phase

In the Find phase

- a vulnerability initiative will establish a RISK MODEL for a VULNERABILITY.
- which sets out the rules by which RISK-FACTORS will be used
- to generate and prioritise a COHORT
- of PERSONS or HOUSEHOLDS
- with potential NEEDS.



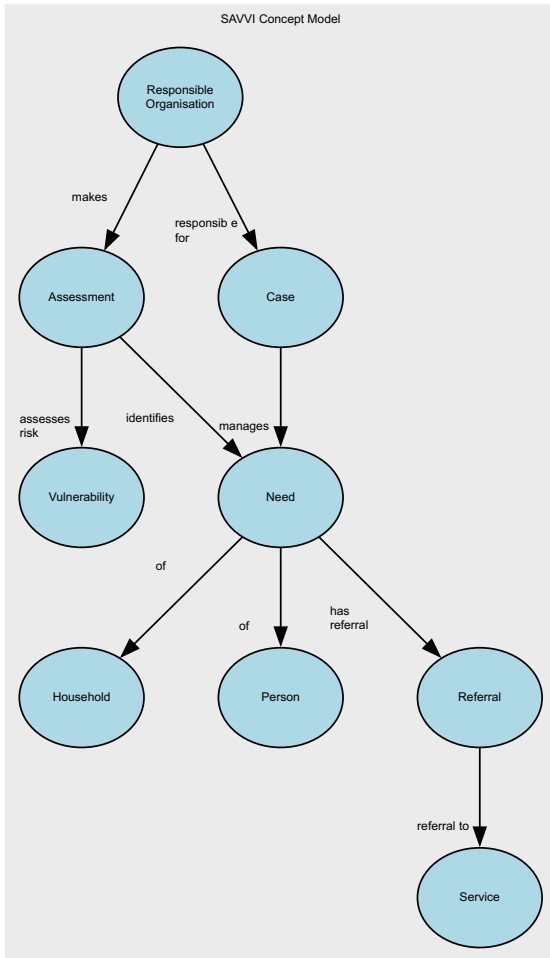
Concepts introduced in the Find phase

| | |
|-------------|---|
| Cohort | An initial prioritised list of people and households that may have a risk of a VULNERABILITY. |
| Household | A collection of PERSONS who live together at the same RESIDENCE. |
| Person | An Individual who may be vulnerable. |
| Residence | A home of a PERSON |
| Risk Factor | A single fact about a Person or Household that can be combined with others to categorise the risk of a VULNERABILITY , and predict NEEDS. |
| Risk Model | The rules by which RISK FACTORS will be used to prioritise VULNERABILITY risk, and predict NEEDS. |

The Assess phase

In the Assess phase

- A RESPONSIBLE-ORGANISATION may choose to raise a CASE about PERSON or HOUSEHOLD, for example, if
 - they appear in a COHORT
 - they present themselves as vulnerable
 - they are referred by another organisation or professional
- an ASSESSMENT will capture new circumstance information and identify one or more NEEDs.
- each NEED can then have a REFERRAL to a SERVICE
- offered by a DELIVERY-ORGANISATION.



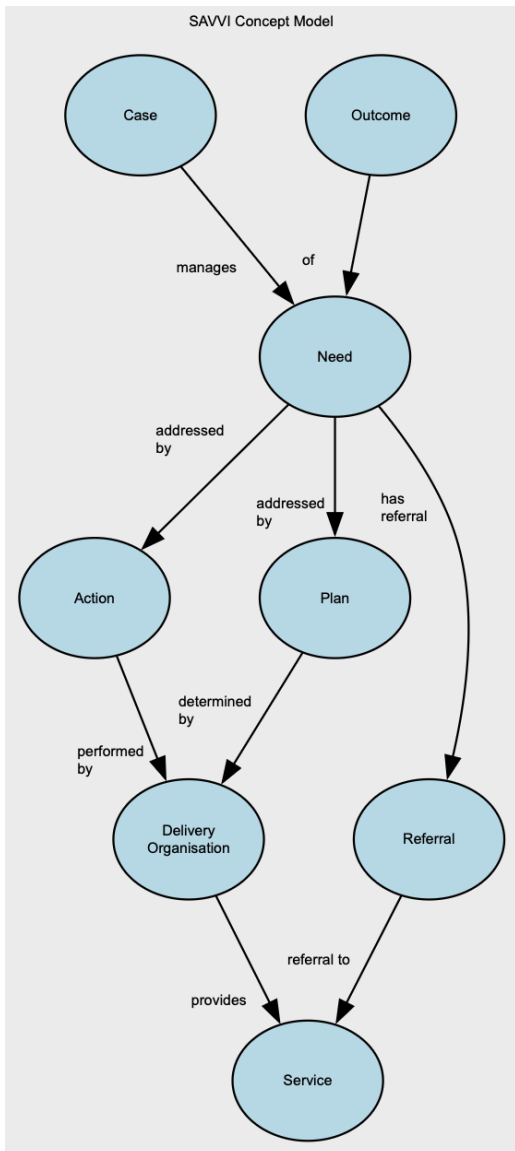
Concepts introduced in the Assess phase

| | |
|--------------------------|--|
| Assessment | An understanding of NEEDs and circumstances. |
| Case | A container for information recording the history of events for a PERSON or HOUSEHOLD who may have NEEDs. |
| Referral | A decision to direct a NEED to a support SERVICE. |
| Responsible Organisation | An organisation who is made responsible for a CASE. |
| Service | The ability for a Delivery Organisation to carry out one or more predetermined methods designed to deliver an OUTCOME. |

The Support phase

In the Support phase

- a NEED may have a REFERRAL
- to a SERVICE provided by a DELIVERY-ORGANISATION.
- which may
 - create a PLAN
 - record individual ACTIONS.
- which can be recorded on the CASE.
- Each NEED will reach an OUTCOME which may have been achieved via a REFERRAL



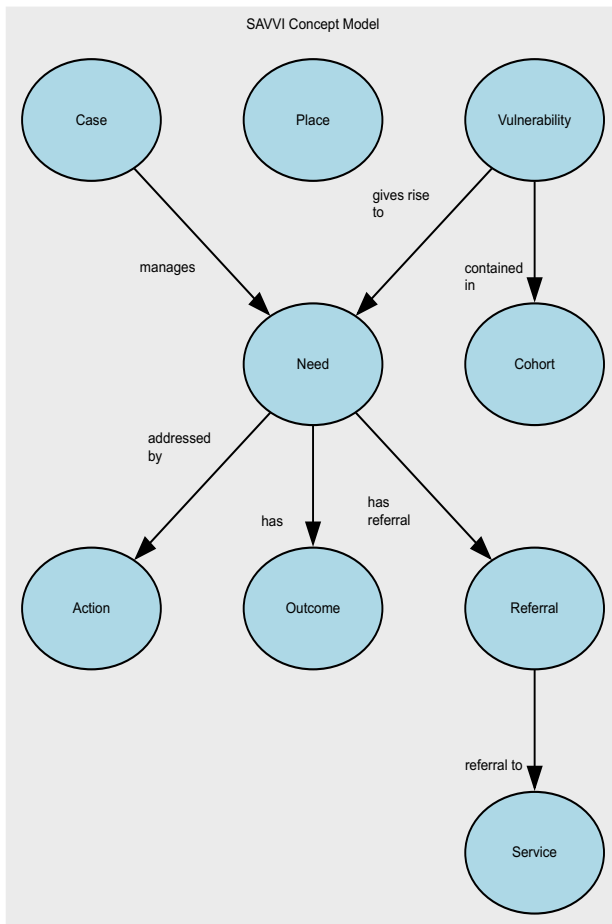
Concepts introduced in the Support phase

| | |
|-----------------------|--|
| Action | An action that has been carried out as a part of responding to a NEED. |
| Delivery Organisation | A service provider who delivers actions that respond to a NEED. |
| Plan | A set of planned actions designed to respond to a NEED over a period. |

The Report phase

In the Report phase

- a dashboard can be created that can report on caseload information such as
 - how many items are in COHORT
 - how many CASEs have had an ASSESSMENT
 - how many of each type of unmet NEED have been found
 - how many REFERRALS have been made to each SERVICE
 - what OUTCOMES have been achieved
- the report can be split by PLACE of the RESIDENCE of HOUSEHOLDS.
- when limited to a time period, this information can produce an Outcomes Framework.



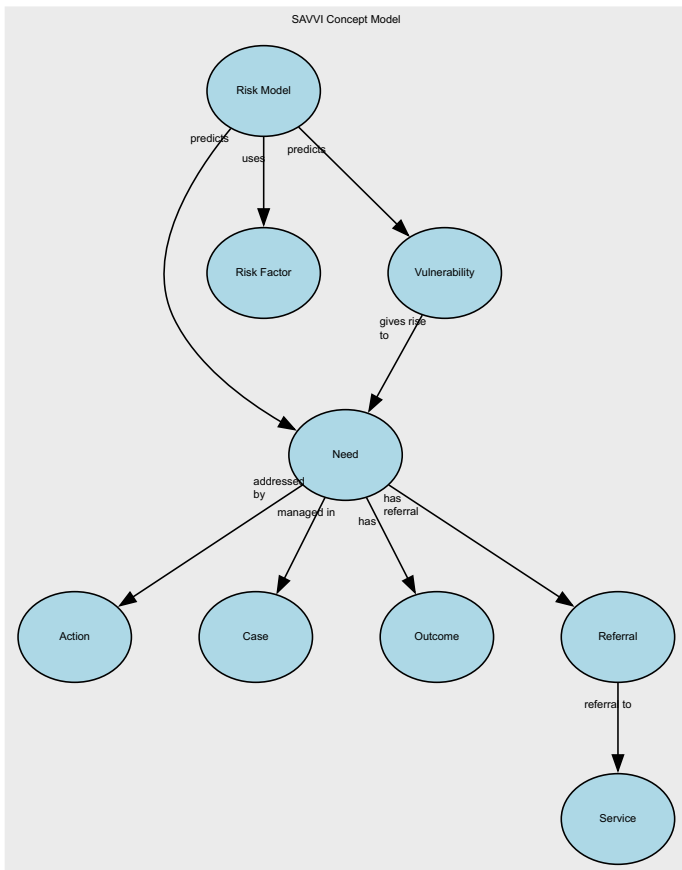
Concepts introduced in the Report phase

| | |
|-------|--------------------|
| Place | A geographic area. |
|-------|--------------------|

The Improve phase

In the Improve phase

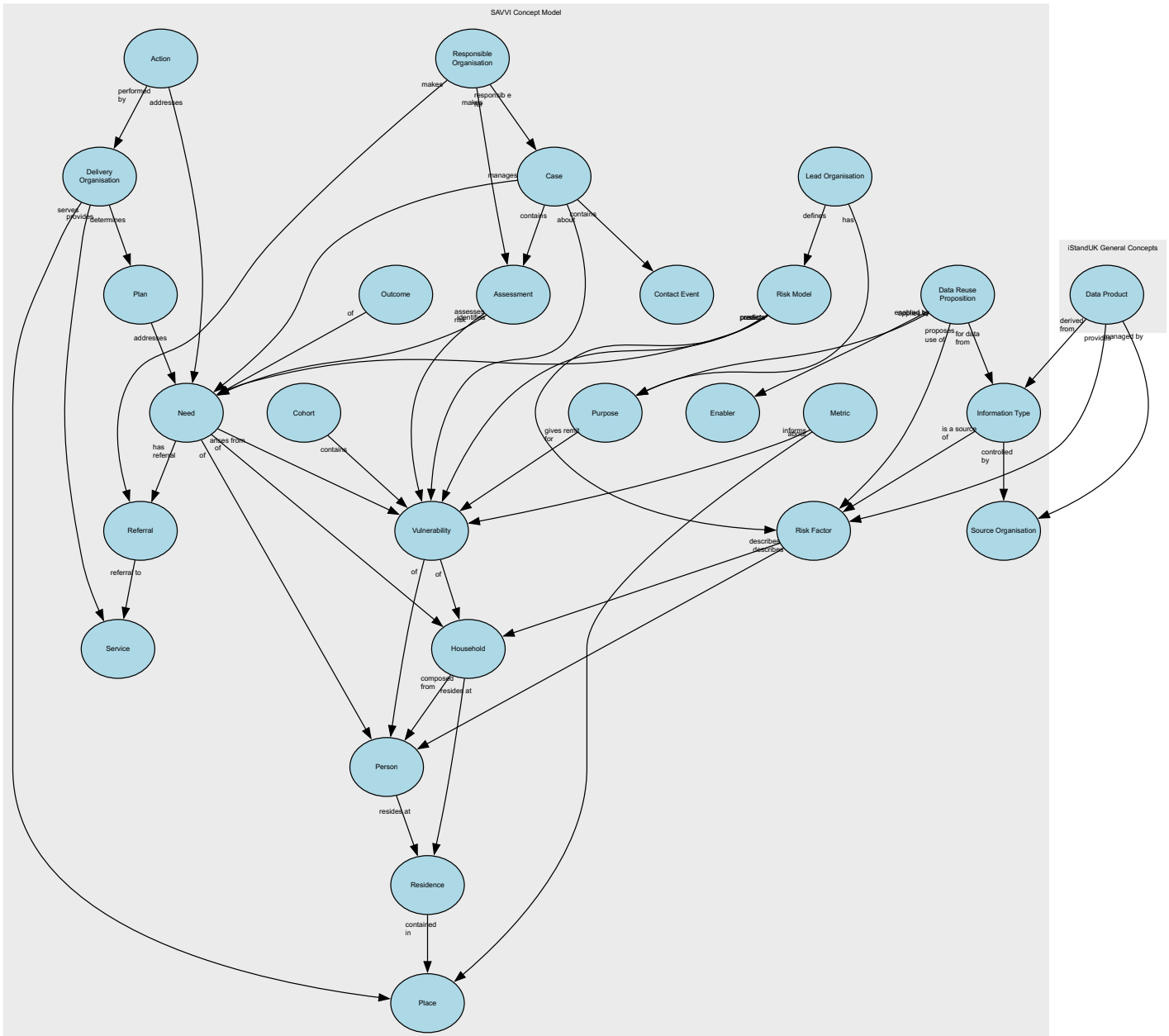
- having used data to Find and Support vulnerable people
- there is an opportunity to review anonymised CASE data
- to create insights as to how the process could be improved.
- In particular, improvements could be made to
 - the rules and weightings in the RISK-MODEL
 - the use, and data quality of RISK-FACTORS
 - prediction of NEEDS
 - the REFERRALS of NEEDS to SERVICES that lead to good OUTCOMES



Concepts introduced in the Improve phase

No new concepts are introduced for the Improve phase, as this is about analysing data already collected during the operation of the process.

The whole Concept Model



Definitions

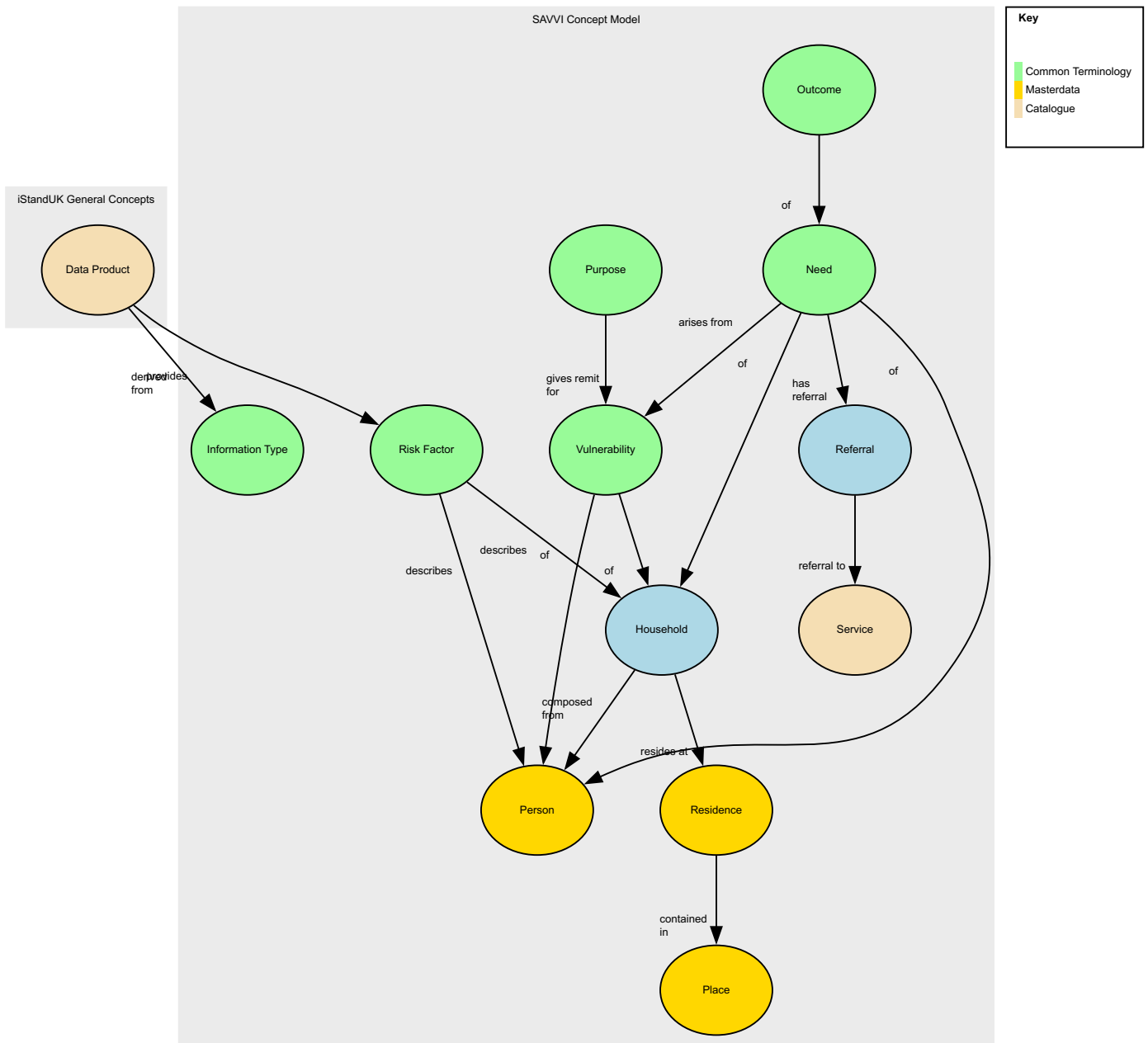
| | |
|------------|--|
| Action | An action that has been carried out as a part of responding to a NEED. |
| Assessment | An understanding of NEEDs and circumstances. |
| Case | A container for information established to manage one or more NEEDs for a PERSON or HOUSEHOLD, through which events, evidence, activities, and decisions are recorded and tracked over time in order to achieve an intended OUTCOME. |
| Cohort | An initial prioritised list of people and households that may have a risk of a VULNERABILITY. |

| | |
|--------------------------|---|
| Contact Event | A record of an event in which the situation of a person or household was sought. |
| Delivery Organisation | A service provider who delivers actions that respond to a NEED. |
| Household | A collection of PERSONs who live together at the same RESIDENCE. |
| Lead Organisation | An organisation responsible for coordinating a vulnerability initiative, and with remit for the PURPOSE. |
| Metric | A statistic that evidences the imperative for a VULNERABILITY to be addressed. |
| Need | An unmet requirement of a Person or Household that can be addressed. |
| Outcome | A result that has been achieved by addressing the NEEDs of a Person or Household. |
| Person | An Individual who may be vulnerable. |
| Plan | A set of planned actions designed to respond to a NEED over a period. |
| Purpose | The remit that an Organisation has to carry out an initiative covering one or more VULNERABILITYs. |
| Referral | A decision to direct a NEED to a support SERVICE. |
| Residence | A home of a PERSON |
| Responsible Organisation | An organisation who is made responsible for a CASE. |
| Risk Factor | A single fact about a Person or Household that can be combined with others to categorise the risk of a VULNERABILITY , and predict NEEDs. |
| Risk Model | The rules by which RISK FACTORs will be used to prioritise VULNERABILITY risk, and predict NEEDs. |
| Service | The ability for a Delivery Organisation to carry out one or more predetermined methods designed to deliver an OUTCOME. |
| Vulnerability | The increased risk of a poor outcome. |

Reference Data, Masterdata and Catalogues

Some of the Concepts indicate a further requirement for

| | |
|---|--|
| <ul style="list-style-type: none"> Terminology | a controlled and shared set of terms and definitions used to ensure consistent understanding and interpretation of concepts across organisations, systems, and services. |
| <ul style="list-style-type: none"> Master Data | authoritative core data describing key entities such as people, organisations, or places that is shared and reused across multiple systems. |
| <ul style="list-style-type: none"> Catalogues | a structured listing of available resources, such as services or data sources, published so they can be discovered and used. |



Use Cases for Interoperability

The SAVVI Process suggests various opportunities where data could be exchanged

- between technology components or platforms
- over organisational boundaries

... such as

| | |
|---|---|
| <ul style="list-style-type: none"> • Access to RISK FACTOR data | pulling RISK FACTOR data from a data product, for a specified PURPOSE to the build a COHORT or PERSONS/HOUSEHOLDS who may be at risk of a VULNERABILITY |
| <ul style="list-style-type: none"> • Discovering support SERVICES | matching assessed NEEDs to lookup a shared Directory of SERVICES |
| <ul style="list-style-type: none"> • Making Referrals | referring a NEED to a SERVICE, and tracking OUTCOMES |
| <ul style="list-style-type: none"> • Shared Casework | a single view of a case built from disparate REFERALLs, PLANs and ACTIONs |
| <ul style="list-style-type: none"> • Reporting to a shared dashboard | collecting REFERRALS and OUTCOMES data from partners to monitor COHORTs and CASEs |

These opportunities have influenced the design of the Logical Model.

The Logical Model

This document presents the whole Logical Model, and then shows each Entity in detail. These views of the Logical Model are also shown at [the SAVVI website](#) together with various machine readable formats including

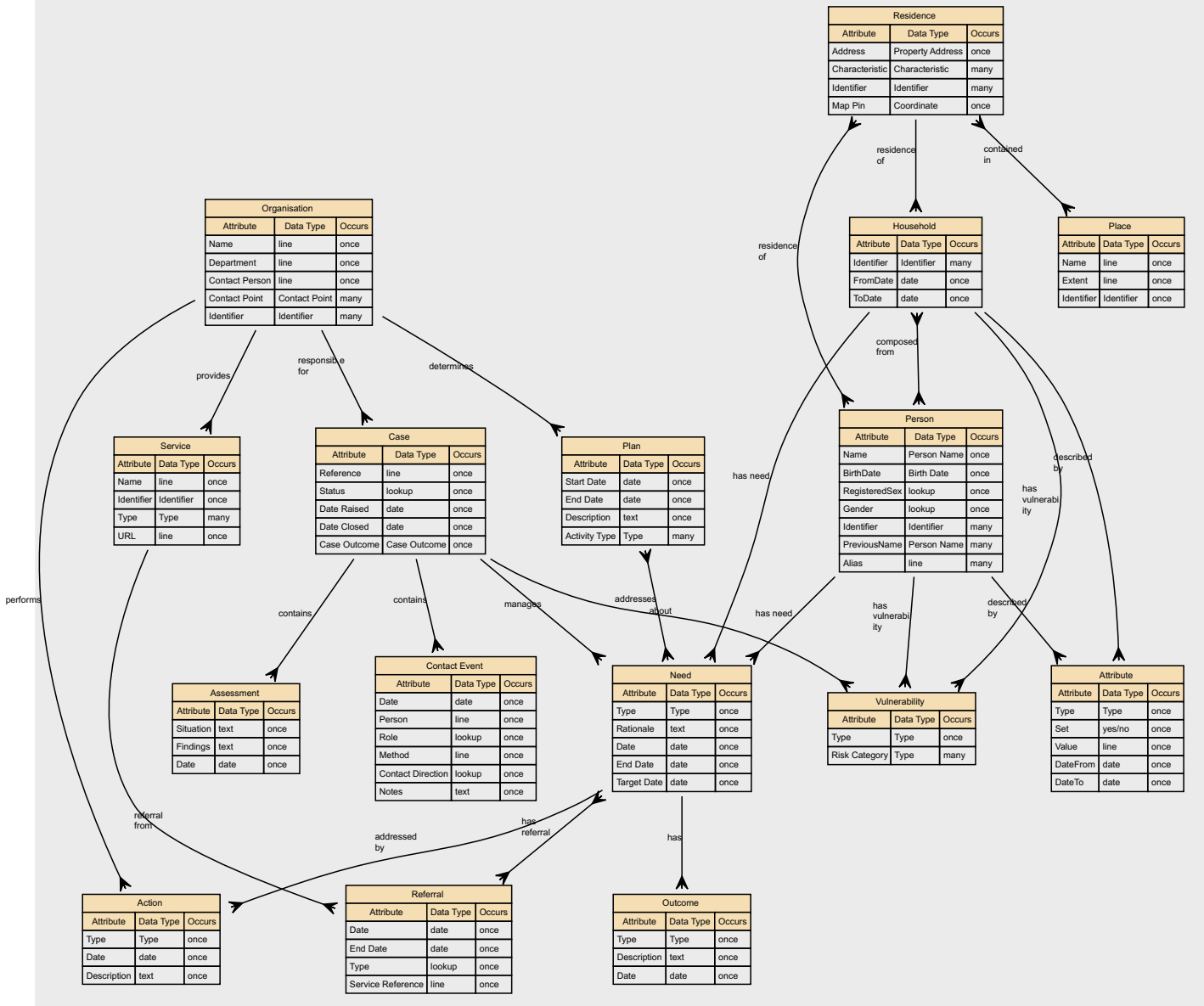
- [RDF Schema](#) (RDFS)
- [XML Schema](#) (XSD)
- [comma separated values](#) (CSV)

The Logical Model

- is a menu to derive interchange formats for Interoperability
- has no new ideas - these implement the Concept Model
- is NOT intended for data at rest
- is designed to be extensible, avoiding hard-coded fields for particular vulnerabilities, so that new risk factors, needs, identifier schemes, and so on, can be added without changing the core model.

Each Entity in the model is further defined in Appendix B - Entity Definitions.

SAWVI Logical Model



Domain Expert Groups

In parallel to this Vulnerability work, the [Data Standards Authority](#) (DSA) is also running 'expert groups' to look at some entities that commonly occur in shared data, to propose a common data structure to be applied consistently across public sector data.

The Vulnerability Logical Model will adopt those structures as they are issued.

Appendix A - Common Structures

Some data structures are used repeatedly across the Logical Model

Type

The Type structure records a Term as the type of an Entity. For example

- Risk Factor: Court Action
- Need: Family Counselling

As a minimum, a Term should be provided. Better is to provide a Term within a shared Scheme (Terminology), and best is to provide a URI which can be dereferenced to give a precise definition of the Term.

| Attribute | | Data Type | Structure | occurs | required |
|-----------|--|-----------|-----------|--------|----------|
| Scheme | To define the scheme that the type is taken from. e.g. 'LG Inform Circumstance List' | lookup | | once | |
| Term | A term that represents a type. e.g. 'unemployed'. Where a scheme has been defined, this should be a term from that scheme. | line | | once | yes |
| URI? | A persistent identifier for the Term. This should be an HTTP Resolvable Identifier - see Persistent resolvable identifiers - GOV.UK (www.gov.uk) | yes/no | | once | |

Identifier

The Identifier structure records an identifier from a scheme. For example,

- unique pupil number:A123456789001A
- UPRN: 100021064336

Entities often have an array of Identifiers, so that many can be recorded.

| Attribute | | Data Type | Structure | occurs | required |
|-----------|---|-----------|-----------|--------|----------|
| Scheme | The name of a controlled set of identifiers | lookup | | once | |
| Reference | A reference to uniquely identify a thing | line | | once | yes |

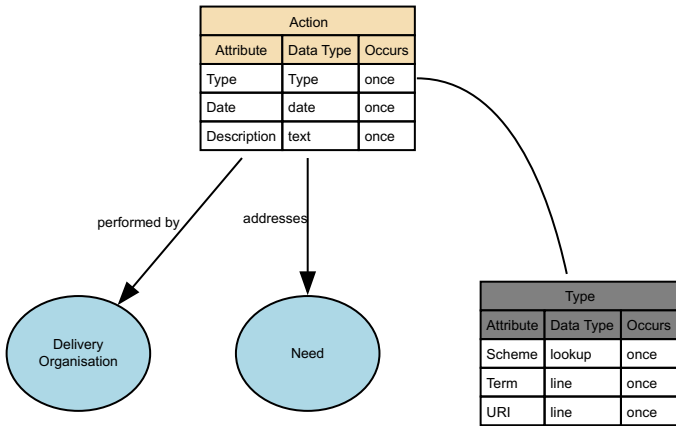
| | | | | | |
|----------------|---|--------|--|------|--|
| Pseudonymised? | To indicate that the reference is pseudonymised | yes/no | | once | |
|----------------|---|--------|--|------|--|

Coordinates

| Attribute | Description | Data Type | Structure / Terminology | Occurs | Required |
|-----------|--|-----------|-------------------------|--------|----------|
| Latitude | The latitude of a position expressed using the WGS84 datum. | number | | once | yes |
| Longitude | The longitude of a position expressed using the WGS84 datum. | number | | once | yes |

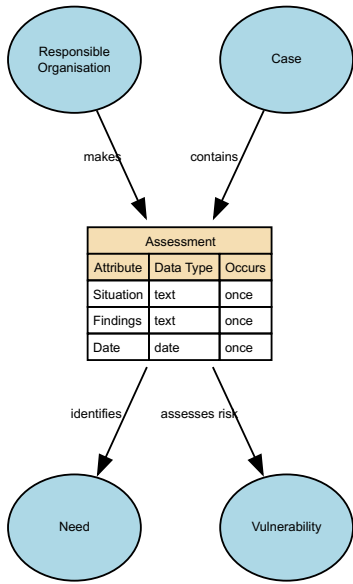
Appendix B - Entity Definitions

Action



| Name | Description | Data Type | Structure / Terminology | Occurs | Required |
|-------------|---|-----------|-------------------------|--------|----------|
| Type | The type of action - e.g. * food parcel * debt advice | | Type | once | |
| Date | The date of the Action. | date | | once | yes |
| Description | A description of the Action. | text | | once | |

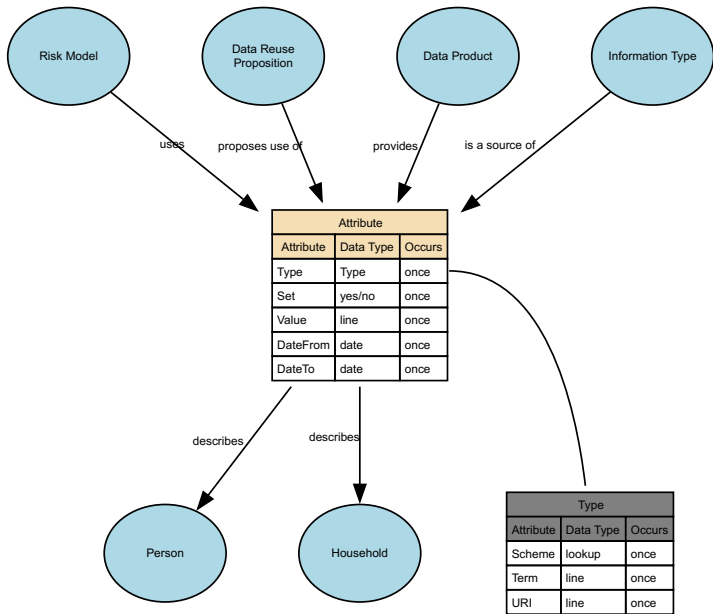
Assessment



| Name | Description | Data Type | Structure / Terminology | Occurs | Required |
|-----------|--|-----------|-------------------------|--------|----------|
| Situation | A record of the situation to be assessed. | text | | once | |
| Findings | A judgement of the Needs arising from the Situation. | text | | once | |
| Date | The date of the Assessment | date | | once | |

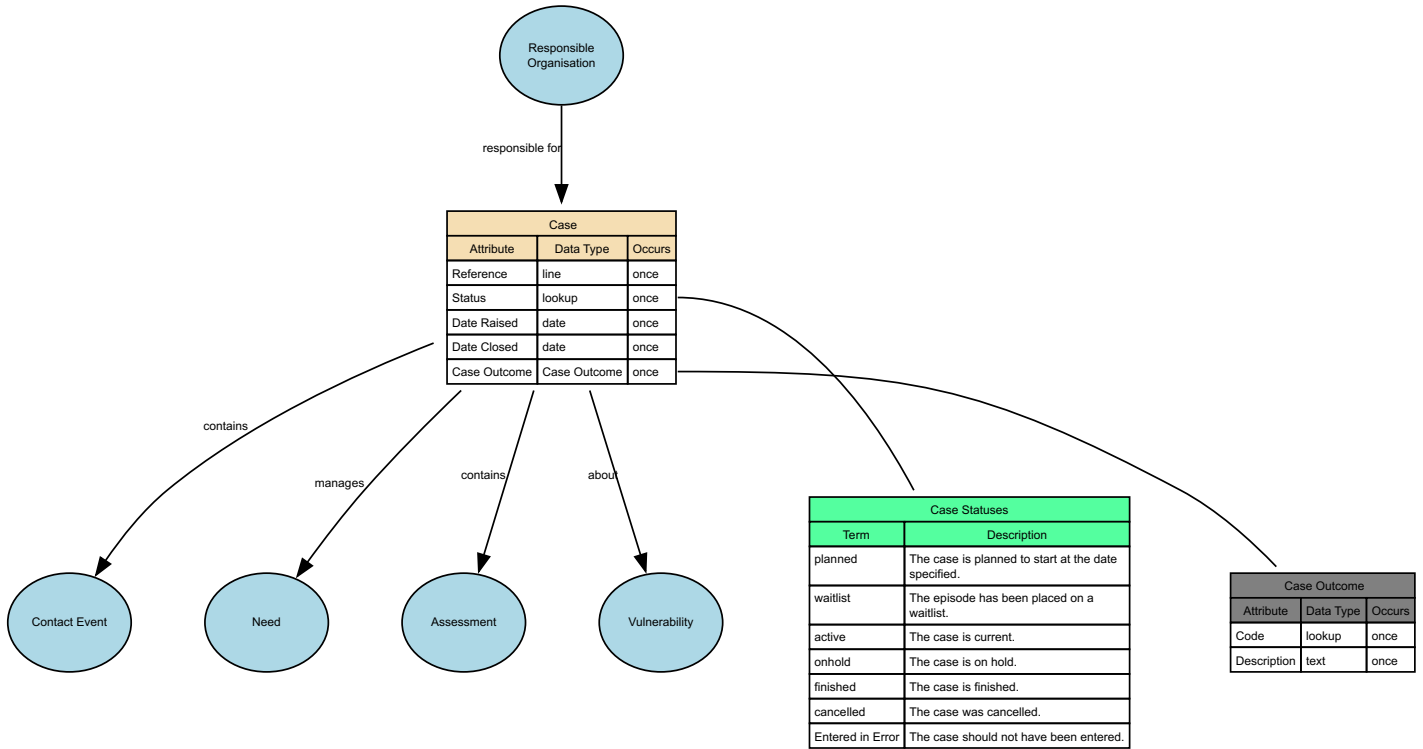
Attribute

Implements the 'Risk Factor' concept



| Name | Description | Data Type | Structure / Terminology | Occurs | Required |
|----------|--|-----------|-------------------------|--------|----------|
| Type | To describe the Attribute. e.g. In receipt of Universal Credit, Living Alone. | | Type | once | yes |
| Set | To indicate if the presence of the Attribute is true or false. | yes/no | | once | yes |
| Value | An optional value associated with an Attribute, e.g. if the Type is '% attendance', the Value may be 60. | line | | once | no |
| DateFrom | The date from which the Attribute is true. | date | | once | |
| DateTo | The date from which the Attribute may no longer be true, or is expected to end. | date | | once | |

Case



| Name | Description | Data Type | Structure / Terminology | Occurs | Required |
|--------------|-------------------------------------|-----------|-------------------------|--------|----------|
| Reference | The Case Reference. | line | | once | yes |
| Status | | lookup | Case Statuses | once | |
| Date Raised | The date that the Case was started. | date | | once | |
| Date Closed | The date that the Case was closed. | date | | once | |
| Case Outcome | | | Case Outcome | once | |

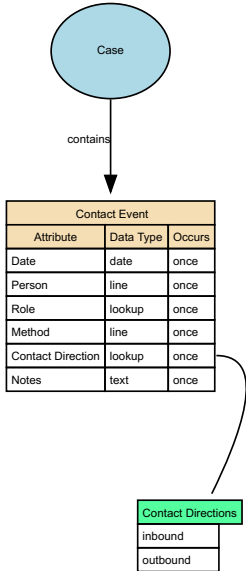
Structures

Case Outcomes

| Name | Description | Data Type | Structure / Terminology | Occurs | Required |
|------|-------------|-----------|-------------------------|--------|----------|
|------|-------------|-----------|-------------------------|--------|----------|

| | | | | | |
|-------------|--|--------|--|------|-----|
| Code | | lookup | | once | yes |
| Description | | text | | once | |

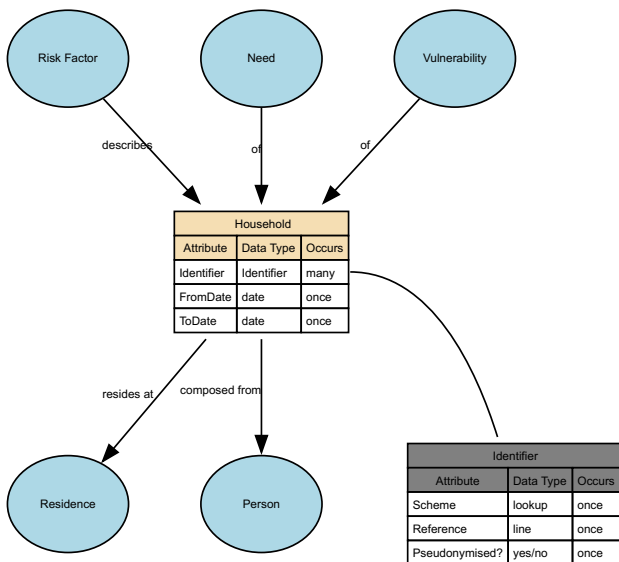
Contact Event



| Name | Description | Data Type | Structure / Terminology | Occurs | Required |
|--------|---|-----------|-------------------------|--------|----------|
| Date | The date of the contact. | date | | once | |
| Person | The name of the contacted person | line | | once | |
| Role | The role of the contacted person e.g. * Vulnerable Person * Friend * Relative * Public * Professional * Community Group * Elected Representative | lookup | | once | |

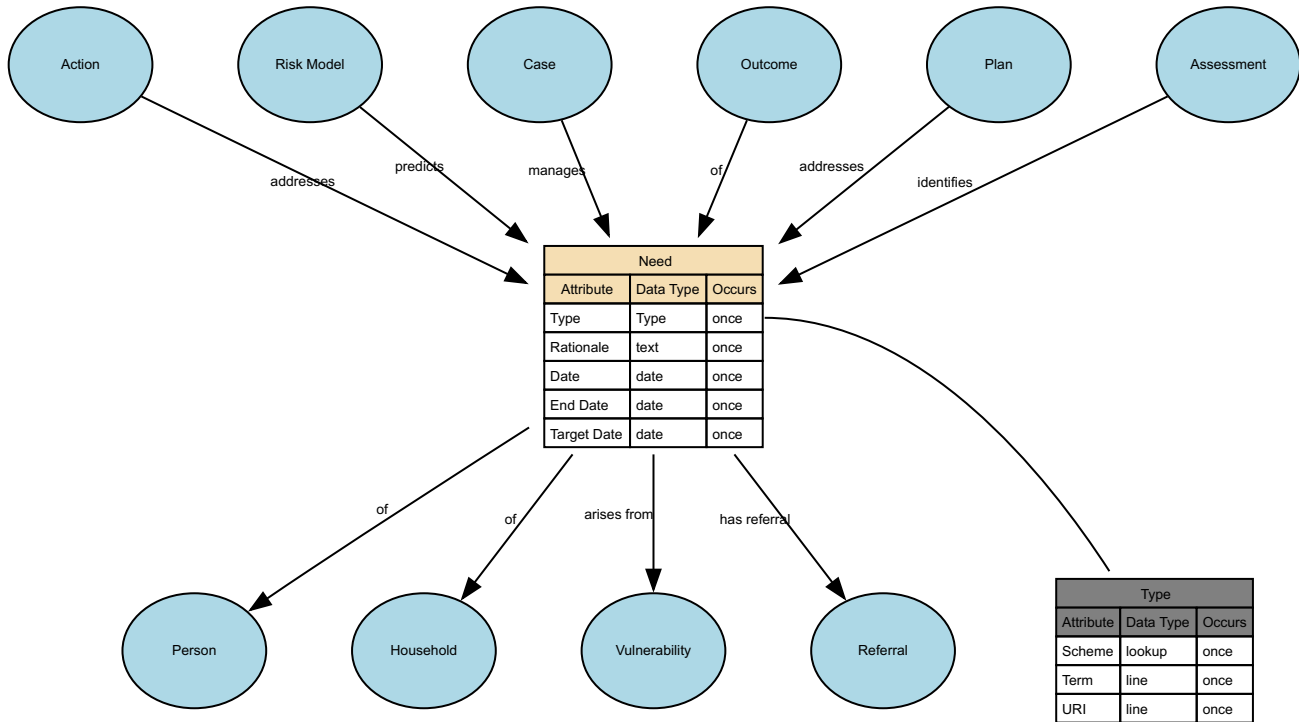
| | | | | | |
|-------------------|--|--------|--------------------|------|--|
| Method | The method used to make the contact e.g. * phone * home visit * digital | lookup | | once | |
| Contact Direction | To indicate who initiated the contact. | lookup | Contact Directions | once | |
| Notes | Notes of the Contact Event | text | | once | |

Household



| Name | Description | Data Type | Structure / Terminology | Occurs | Required |
|------------|--|-----------|-------------------------|--------|----------|
| Identifier | | | Identifier | many | |
| FromDate | A date from which the Household is known to be formed. | date | | once | |
| ToDate | A date after which the Household may not be formed. | date | | once | |

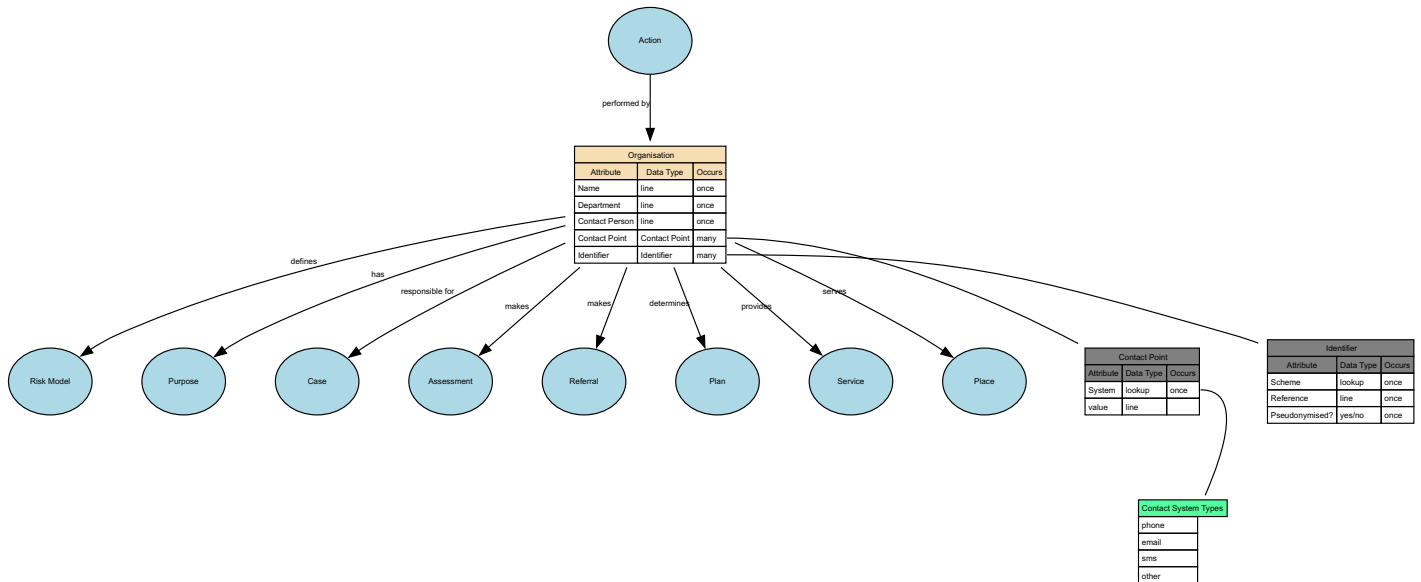
Need



| Name | Description | Data Type | Structure / Terminology | Occurs | Required |
|-------------|---|-----------|-------------------------|--------|----------|
| Type | | | Type | once | yes |
| Rationale | The reasoning for the Need. | text | | once | |
| Date | The date that the Need is established. | date | | once | |
| End Date | The date that the Need was resolved. | date | | once | |
| Target Date | The date that the Need should be resolved by, for it to be effective. | date | | once | |

Organisation

Implements the 'Lead Organisation', 'Responsible Organisation' and 'Delivery Organisation' concepts.



| Name | Description | Data Type | Structure / Terminology | Occurs | Required |
|----------------|---|-----------|-------------------------|--------|----------|
| Name | | line | | once | yes |
| Department | | line | | once | |
| Contact Person | | line | | once | |
| Contact Point | | | Contact Point | many | |
| Identifier | Reference by which the organisation is known, e.g. * GDS Register of Local Authorities * Companies House Number * Charity Number | | Identifier | many | |

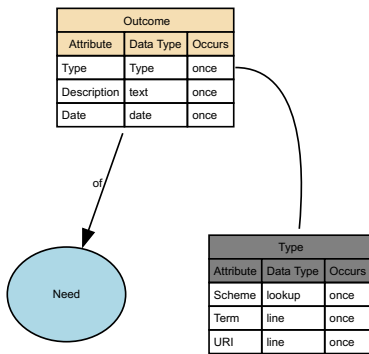
Structures

Contact Point

| Name | Description | Data Type | Structure / Terminology | Occurs | Required |
|------|-------------|-----------|-------------------------|--------|----------|
|------|-------------|-----------|-------------------------|--------|----------|

| | | | | | |
|--------|---|--------|----------------------|------|--|
| System | Telecommunications form for contact point | lookup | Contact System Types | once | |
| value | | line | | | |

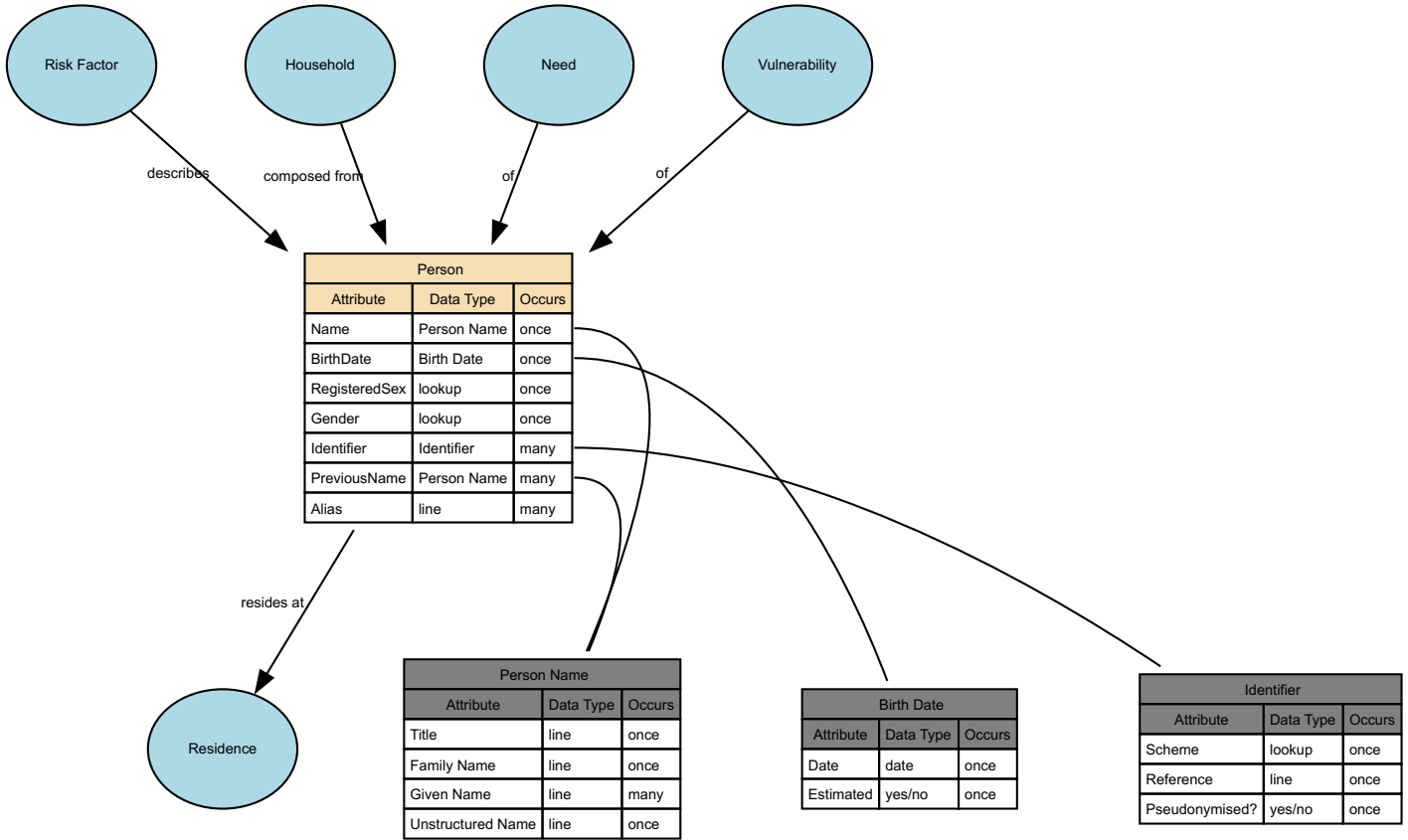
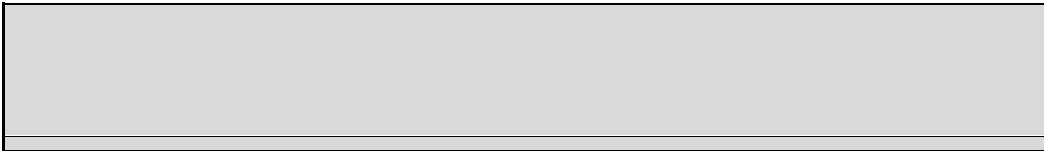
Outcome



| Name | Description | Data Type | Structure / Terminology | Occurs | Required |
|-------------|---|-----------|-------------------------|--------|----------|
| Type | | | Type | once | yes |
| Description | A description of the Outcome. | text | | once | |
| Date | The date that the Outcome was achieved. | date | | once | |

Person

NOTE:- A common data specification to represent a PERSON is currently being developed by a DSA Domain Expert Group. The Vulnerability Logical Model will take on data structures from that work when it is available.



| Name | Description | Data Type | Structure / Terminology | Occurs | Required |
|---------------|--|-----------|-------------------------|--------|----------|
| Name | The official name of a person. | | Person Name | once | |
| BirthDate | The date that a person was born. | | Birth Date | once | |
| RegisteredSex | The sex recorded for a person in an official civil registration or legal record, such as the sex recorded at birth. Use an agreed code list such as Codesystem-administrative-gender - FHIR v5.0.0 | lookup | | once | no |
| Gender | A social category for the sex that a person self-presents as. Use an agreed code list such as Codesystem-administrative-gender - FHIR v5.0.0 | lookup | | once | no |

| | | | | | |
|--------------|---|------|-------------|------|----|
| Identifier | References by which a person is known, in various schemes. e.g. NiNo, Health Number, a local reference. | | Identifier | many | |
| PreviousName | Names that a person has previously been known as. | | Person Name | many | no |
| Alias | An assumed or additional name that a Person sometimes uses, or a shortened diminutive version of a name, e.g. Betty, Smithy, by which a Person is generally known by family and friends, or to a Service. | line | | many | |

Structures

Person Name

| Name | Description | Data Type | Structure / Terminology | Occurs | Required |
|-------------------|---|-----------|-------------------------|--------|----------|
| Title | | line | | once | |
| Family Name | | line | | once | |
| Given Name | | line | | many | |
| Unstructured Name | A rendition of the name that does not attempt to indicate meaning of the parts in the name. e.g. Mr Bert Smith. | line | | once | |

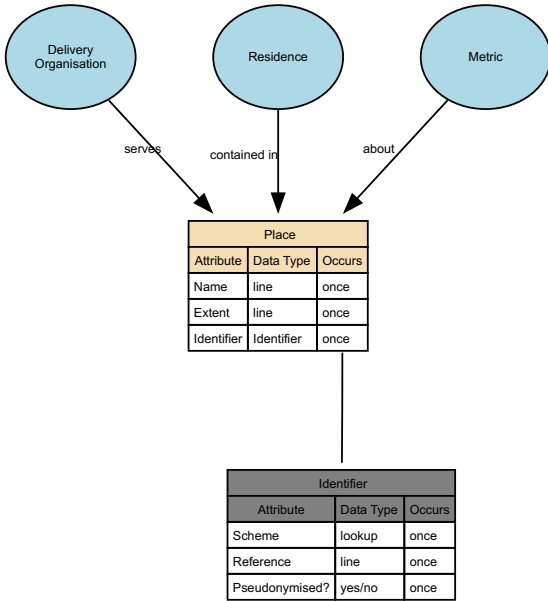
Birth Date

| Name | Description | Data Type | Structure / Terminology | Occurs | Required |
|-----------|--|-----------|-------------------------|--------|----------|
| Date | | date | | once | |
| Estimated | To indicate that the date is an estimate. If false, or absent, then the date is not at estimate. | yes/no | | once | no |

Place

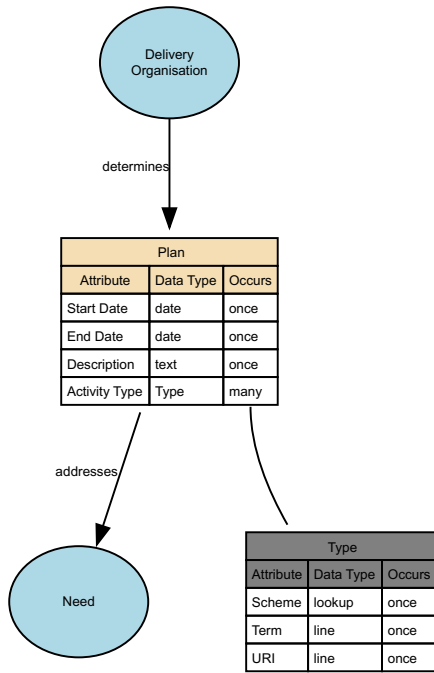
Can mean

- a one-of polygon
- a street
- a neighbourhood
- an existing statistical or administrative geography



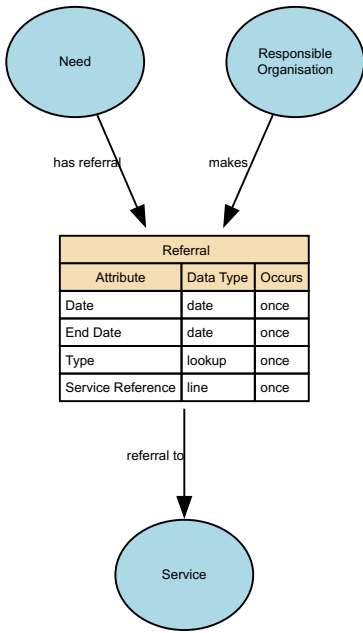
| Name | Description | Data Type | Structure / Terminology | Occurs | Required |
|------------|--|-----------|-------------------------|--------|----------|
| Name | The name of the Place | line | | once | yes |
| Extent | A geographic shape expressed using an established data standard such as <ul style="list-style-type: none"> • the OGC Well-Known Text (WKT) geometry format ('POLYGON') • GeoJSON | line | | once | no |
| Identifier | | | Identifier | once | no |

Plan



| Name | Description | Data Type | Structure / Terminology | Occurs | Required |
|---------------|--|-----------|-------------------------|--------|----------|
| Start Date | The date that the plan starts from. | date | | once | |
| End Date | The date when the plan has ended, or is expected to end. | date | | once | |
| Description | A description of the plan. | text | | once | |
| Activity Type | The Activities that the Plan includes. | | Type | many | |

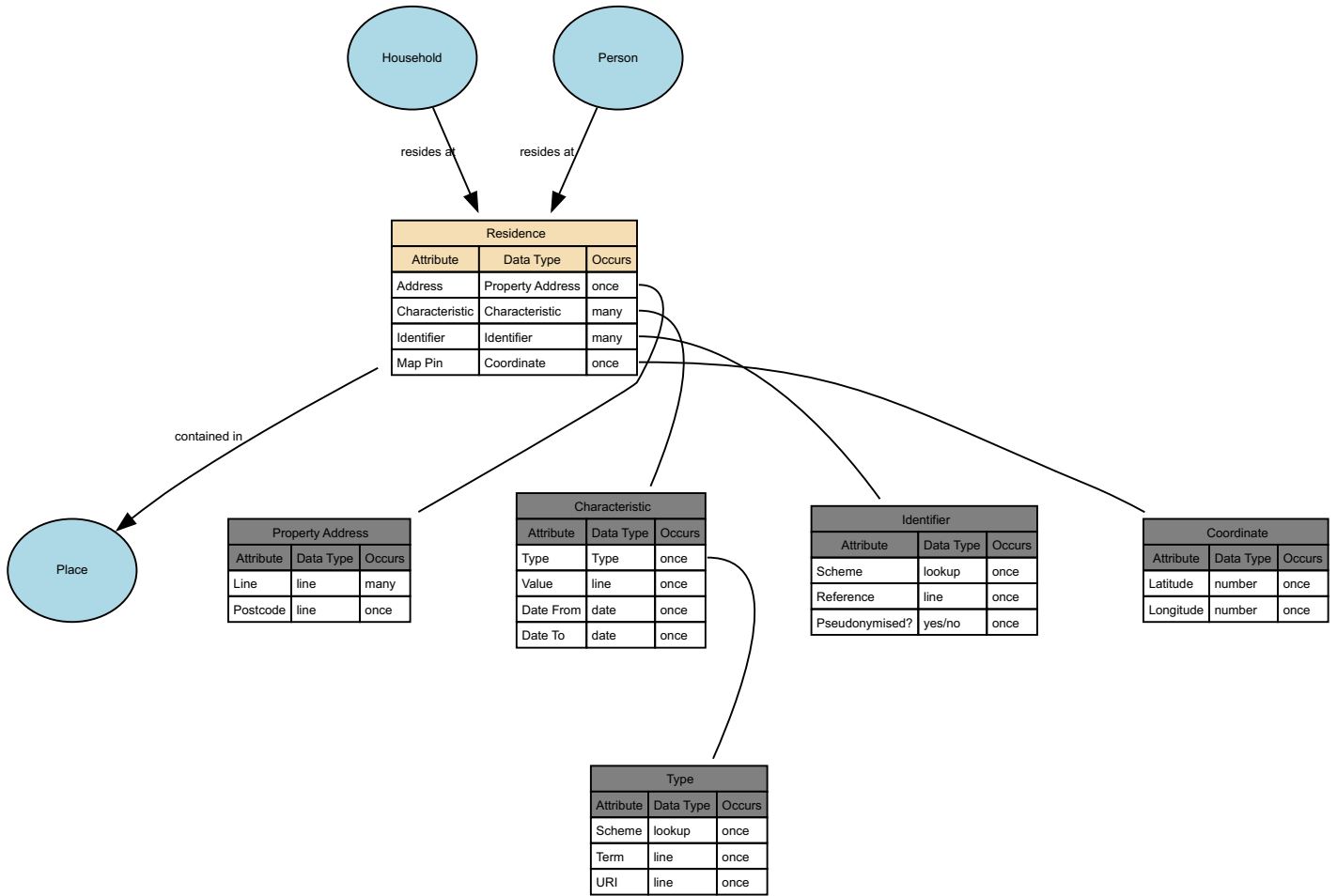
Referral



| Referral | | |
|-------------------|-----------|--------|
| Attribute | Data Type | Occurs |
| Date | date | once |
| End Date | date | once |
| Type | lookup | once |
| Service Reference | line | once |

| Name | Description | Data Type | Structure / Terminology | Occurs | Required |
|-------------------|---|-----------|-------------------------|--------|----------|
| Date | The date that a decision was made to make the referral. | date | | once | yes |
| End Date | The date that the referral ended. | date | | once | |
| Type | * direct * recommended * signposted | lookup | | once | yes |
| Service Reference | The reference assigned by the Service | line | | once | |

Residence



| Name | Description | Data Type | Structure / Terminology | Occurs | Required |
|----------------|--|-----------|-------------------------|--------|----------|
| Address | | | Property Address | once | |
| Characteristic | Information about the residence such as the number or bedrooms, condition. | | Characteristic | many | |
| Identifier | Properties are known by Identifiers such as the UPRN from GeoPlace. | | Identifier | many | |
| Map Pin | | | Coordinate | once | |

Structures

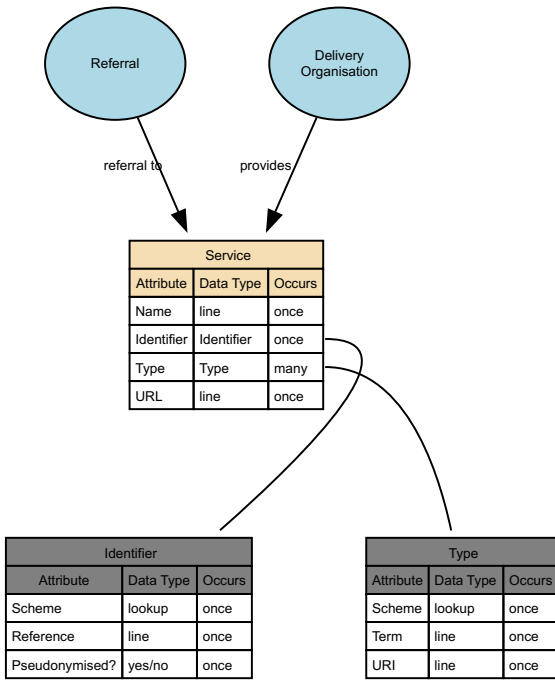
Property Address

| Name | Description | Data Type | Structure / Terminology | Occurs | Required |
|----------|-------------|-----------|-------------------------|--------|----------|
| Line | | line | | many | |
| Postcode | | line | | once | |

Characteristics

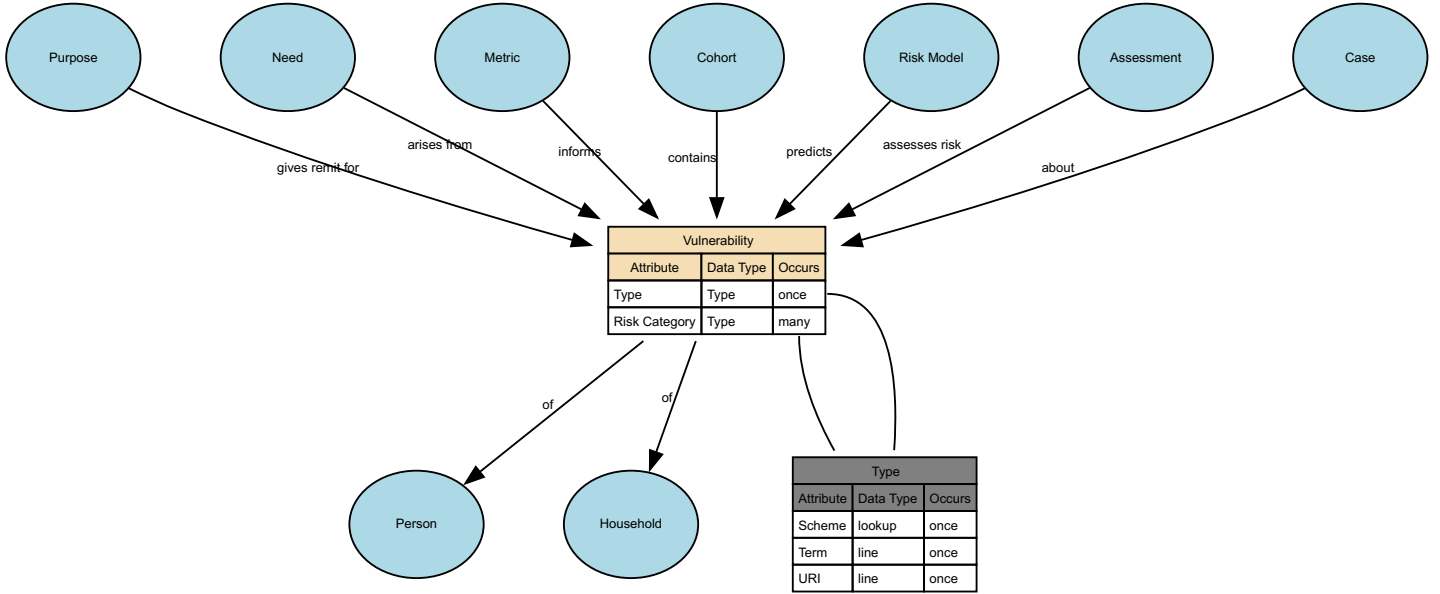
| Name | Description | Data Type | Structure / Terminology | Occurs | Required |
|-----------|---|-----------|-------------------------|--------|----------|
| Type | The Type of the Characteristic. | | Type | once | yes |
| Value | An optional value that quantifies the Characteristic. e.g. if the Type is 'number of bedrooms', the Value may be 3. Many Types will not need a value. | line | | once | no |
| Date From | The date from which the Characteristic is true. | date | | once | no |
| Date To | The date from which the Characteristic may no longer be true, or is expected to end. | date | | once | no |

Service



| Name | Description | Data Type | Structure / Terminology | Occurs | Required |
|------------|--|-----------|-------------------------|--------|----------|
| Name | The name of the Service. | line | | once | yes |
| Identifier | An Identifier that can be looked up, to provide more information about the Service, such as contact information, eligibility, opening times and so on. | | Identifier | once | |
| Type | A categorisation of the type of Service | | Type | many | |
| URL | A URL to a web page to give more information about a Service | line | | once | |

Vulnerability



| Name | Description | Data Type | Structure / Terminology | Occurs | Required |
|---------------|-------------|-----------|-------------------------|--------|----------|
| Type | | | Type | once | yes |
| Risk Category | | | Type | many | |

Appendix C - Data Types

| Data Type | can contain | xsd data type |
|-----------|--|---------------|
| line | A single line of text without line breaks, typically used for names, titles, or short labels. | xsd:string |
| text | A block of plain text that may contain line breaks but no formatting. | xsd:string |
| markdown | A block of text that may include Markdown formatting for headings, lists, links, and emphasis. | xsd:string |
| number | A numeric value that may include decimal places. | xsd:decimal |
| integer | A numeric value that must not include decimal places. | xsd:integer |
| currency | A monetary value expressed as a decimal number, typically with two fractional digits. | xsd:decimal |
| date | A calendar date without a time component. | xsd:date |
| time | A time of day including hours and minutes, optionally including seconds and milliseconds. | xsd:time |
| datetime | A specific date and time, typically representing when an event occurred. | xsd:dateTime |
| timestamp | A precise date and time value typically used for system recording or audit purposes. | xsd:dateTime |
| URI | A Uniform Resource Identifier that uniquely identifies a resource using a valid URI scheme. | xsd:anyURI |
| URL | A web address that identifies a resource accessible via the web and includes a protocol such as http or https. | xsd:anyURI |
| URN | A Uniform Resource Name that uniquely identifies a resource using a URN scheme. | xsd:anyURI |
| yes/no | A logical value indicating true or false. | xsd:boolean |
| lookup | A coded value whose meaning is defined by a controlled list. | xsd:string |