

National Health Services Directory

FHIR Data Model (R4) - Outbound

Date: 23/09/2024

Version: 1.4

Table of Contents

1	Introduction	3
2	Data Model	3
3	Organisation	4
4	Location	5
5	Healthcare Service	6
6	Practitioner.....	7
7	Practitioner Role	8
8	Endpoint.....	9
9	FHIR payload samples.....	10

1 Introduction

The National Health Services Directory (NHSD), managed by Healthdirect Australia, is a secure government data asset that aggregates health services and practitioner information from a range of reliable data sources and publishes this data through Application Programming Interfaces (APIs) and publicly available search tools.

The NHSD has adopted the HL7 Fast Healthcare Interoperability Resources (FHIR) Standard and developed a FHIR compliant API, designed to enable clinical systems to integrate NHSD data to facilitate sending of health information electronically, such as referrals and discharge summaries.

The NHSD FHIR API is a service created and operated by Healthdirect Australia to provide integration partners with accurate, up to date health services information in the HL7 FHIR format. More information about the NHSD FHIR API is available at <https://build.fhir.nhsd.healthdirect.org.au/v4/index.html>

Access to the NHSD FHIR API is available via a licence agreement with Healthdirect Australia. For further information regarding access to the NHSD FHIR API, please visit the NHSD website: <https://about.healthdirect.gov.au/using-the-nhsd>

This document provides simplified, summary information about the NHSD FHIR Data Model, including each FHIR Resource (Organization, Healthcare Service, Location, Practitioner, Practitioner Role and Endpoint) and the data attributes within these. For more detailed information, please visit the [NHSD FHIR API Implementation Guide](#) website or contact the NHSD Team at nhsd@healthdirect.org.au

2 Data Model

The diagram below shows the entity relationship from the perspective of the Healthcare Service Resource and is followed with a description of each element.

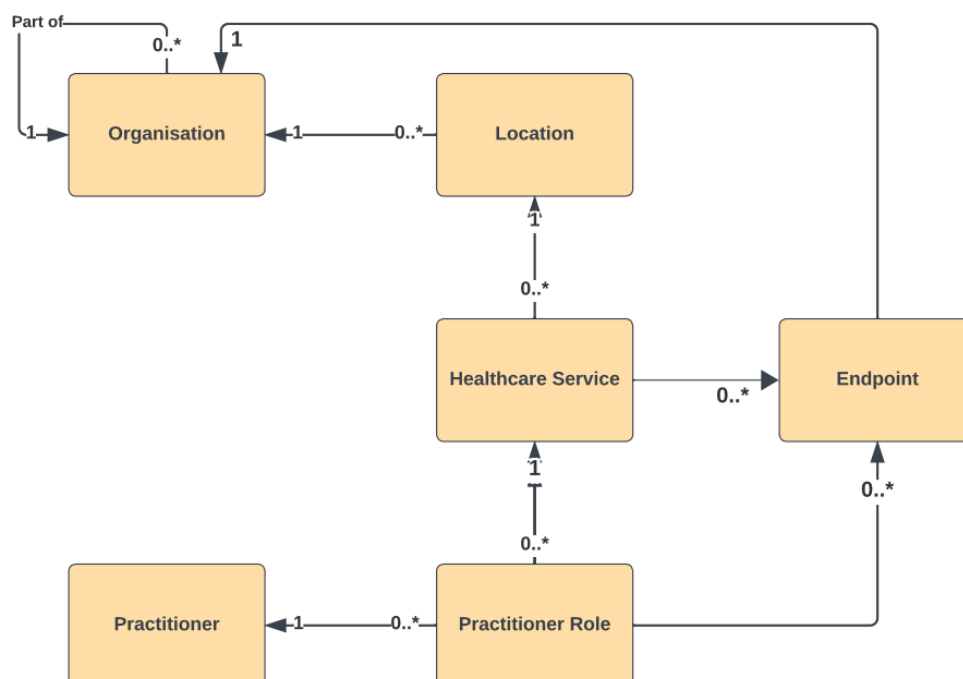


Figure 1 : NHSD FHIR Entity Data model

3 Organisation

<https://build.fhir.nhsd.healthdirect.org.au/v4/StructureDefinition-nhsd-organisation.html>

An organisation is an entity that delivers one or more Healthcare Services and can include multiple practitioners who provide multiple healthcare services. It can be represented by a single practice or by an institution, agency or an association. Ideally an organisation is registered with an authority such as the Australian Business Register, Government agency or peak body (trade association, an association of industries or groups with allied interests).

The NHSD data model and FHIR API supports multi-level organisation structures, which may be required for more complex organisations, such as hospitals.

Element	Card.	Type	Description
id	1..1	string	Logical id of this artifact
meta	1..1	meta	Metadata of the organisation, including last updated time
identifier	1..*	Identifier	NHSD entry Organization identifiers
identifier:abn	0..1	AUAustralianBusinessNumber	Australian Business Number (ABN)
identifier:acn	0..1	AUAustralianCompanyNumber	Australian Company Number (ACN)
identifier:arbn	0..*	AUAustralianRegisteredBodyNumber	Australian Registered Body Number (ARBN)
identifier:rid	0..1	NHSDResourceIdentifier	NHSD Resource Identifier
active	1..1	boolean	Status of the organisation
name	1..1	string	Name of the organisation
alias	0..*	string	Alternate names for the organisation
partOf	0..1	reference	The organisation of which this organisation forms a part
contact	0..*	BackboneElement	Contacts for the organisation

4 Location

<https://build.fhir.nhsd.healthdirect.org.au/v4/StructureDefinition-nhsd-location.html>

The NHSD Location provides address information for Healthcare Service. The Location also provides context for the type of address (through physicalType) where a Healthcare Service is provided as Home services (the service comes to your home) or Virtual services (e.g. Phone, Website, Videoconference).

Element	Card.	Type	Description
id	1..1	string	Logical id of this artifact
meta	1..1	meta	Metadata of the location, including last updated time
identifier	1..*	identifier AULocationSpecificPracticeNumber	NHSD entry Location identifiers
identifier:rid	0..1	NHSDResourceIdentifier	NHSD Resource Identifier
status	1..1	code	Status of the location
name	0..1	string	Name of the location
type	1..1	codeable concept	Type of role - NHSD defaults this to WORK for physical location. NHSD maps all MOBL locations as home visit location regardless of further granularity of a mobile location.
address	0..1	NHSDAddress	Physical Address of the location where the Healthcare Service is provided
physicalType	1..1	CodeableConcept	Location definition of the Service HOME / VIRTUAL / PHYSICAL Binding: Location Type (required)
position	0..1	BackboneElement	The geographic location
managingOrganization	1..1	Reference(NHSD Organisation)	This is a reference to service providing Organization (same as the organisation reference in the connected healthcare service resource)

5 Healthcare Service

<https://build.fhir.nhsd.healthdirect.org.au/v4/StructureDefinition-nhsd-healthcareservice.html>

NHSD Provider directory entry for a healthcare service or category of services delivered at a location by an organisation. In a provider directory this allows the association of endpoints with the healthcare service and thus a channel for delivery to that service.

Element	Card.	Type	Description
id	1..1	string	Logical id of this artifact
meta	1..1	meta	Metadata of the healthcare service, including last updated time
contained	0..*	resource	Coverage area details for VIRTUAL and HOME services
extension	0..*	extension	Provides additional information applicable to the Healthcare service
nhsd-booking-provider	0..*	(Complex)	Information about Booking Providers for a Healthcare Service URL: http://fhir.nhsd.com.au/StructureDefinition/nhsd-booking-provider
identifier	1..*	identifier	Identifiers for the healthcare service
identifier:rid	0..1	NHSDResourceIdentifier	NHSD Resource Identifier
active	1..1	boolean	Status of the healthcare service
providedBy	1..1	reference	Providing organisation
type	1..1	CodeableConcept	Service classification based on SNOMED CT-AU
program	0..*	CodeableConcept	Programs provided by the healthcare service
eligibilites	0..*	CodeableConcept	Eligibilities to access the healthcare service
appointmentRequired	0..*	boolean	Specifies if an appointment is required to visit the healthcare service

location	1..1	Reference(NHSD Location)	Reference to Location where the healthcare service is provided
name	0..1	string	Name of the healthcare service
comment	0..1	string	A short description of the service, which may include additional information not covered elsewhere
telecom	1..*	ContactPoint	Contact details for the healthcare service
coverageArea	0..*	reference	Reference to the Contained resource
characteristic	0..*	CodeableConcept	A grouped set of attributes including funding source, referral information, service offerings, facilities
serviceProvisionCode	1..*	CodeableConcept	Billing options
availableTime	0..*	BackboneElement	Opening times for the healthcare service
notAvailable	0..*	BackboneElement	Specific closed times for the healthcare service
endPoint	0..*	Reference(AU PD Secure Messaging Endpoint), Reference(Endpoint)	Technical endpoints for this healthcare service, including secure messaging endpoints

6 Practitioner

<https://build.fhir.nhsd.healthdirect.org.au/v4/StructureDefinition-nhsd-practitioner.html>

NHSD Provider directory entry for a Practitioner. In a provider directory this provides details of an individual person delivering health related services.

Element	Card.	Type	Description
id	1..1	string	Logical id of this artifact
meta	1..1	meta	Metadata of the practitioner, including last updated time
identifier	1..*	identifier	Identifiers for the practitioner, eg AHPRA registration number
identifier:ahpraregistrationnumber	0..1	AUAHPRARegistrationNumber	Australian Health Practitioner Regulation Agency (AHPRA) Registration Number

identifier:rid	0..1	NHSDResourceIdentifier	NHSD Resource Identifier
active	1..1	boolean	Status of the practitioner
name	1..*	CodeableConcept	The practitioner name
gender	1..1	code	Gender of the practitioner
communication	0..*	CodeableConcept	Language/s the practitioner can use in patient communication

7 Practitioner Role

<https://build.fhir.nhsd.healthdirect.org.au/v4/StructureDefinition-nhsd-practitionerrole.html>

NHSD Provider directory entry for a Practitioner Role describes a practitioner in a role for a Healthcare Service

Element	Card.	Type	Description
id	1..1	string	Logical id of this artifact
meta	1..1	meta	Metadata of the practitioner role, including last updated time
identifier	0..*	identifier	Identifiers for the practitioner role, eg Medicare Provider Number
identifier:rid	0..1	NHSDResourceIdentifier	NHSD Resource Identifier
active	1..1	boolean	Status of the practitioner role
practitioner	1..1	Reference(NHSD Practitioner)	Reference to the Practitioner
organization	1..1	Reference(NHSD Organisation)	Reference to the Organisation
specialty	0..*	CodeableConcept	SNOMED CT-AU Specialty
location	1..1	Reference(NHSD Location)	Reference to the Location
healthcareService	1..1	Reference(NHSD HealthcareService)	Reference to the Healthcare service

endPoint	0..*	Reference(AU PD Secure Messaging Endpoint), Reference(Endpoint)	Technical endpoints for this practitioner role, including secure messaging endpoints
----------	------	---	--

8 Endpoint

<https://build.fhir.nhsd.healthdirect.org.au/v4/StructureDefinition-nhsd-endpoint.html>

NHSD Provider directory entry for Endpoint describes a secure messaging endpoint detail for Healthcare Service/Practitioner Role.

Element	Card	Type	Description
id	1..1	string	Logical id of this artefact
meta	1..1	meta	Metadata of the endpoint, including last updated time
organization	1..1	reference	Reference to the Organization
identifier	1..*	identifier	Identifiers for the endpoint including smd/target
identifier:rid	1..1	NHSDResourceIdentifier	NHSD Resource Identifier
name	0..1	string	Name for the endpoint
au-receivingFacility	0..1	(complex)	Identifies the receiving application among multiple identical instances of the application running on behalf of different organizations.
au.receivingApplicationApplication	0..1	(complex)	Identifies the receiving application among all other applications within the network enterprise. The network enterprise consists of all those applications that participate in the exchange of HL7 messages within the enterprise.
encryption-certificate-pem-x509	0..*	string	An X.509 certificate binds an identity to a public key using a digital signature.
address	1..1	url	URL address of the endpoint.

connectionType	1..1	coding	Endpoint connection type defined via - https://hl7.org.au/fhir/pd/pd2/CodeSystem-smd-interfaces.html
payloadType	1..*	CodeableConcept	Endpoint payload type defined via codes - http://hl7.org.au/fhir/CodeSystem/endpoint-payload-type
payloadMimeType	0..*	code	Endpoint payload Mime Type
contact	0..*	ContactPoint	Endpoint operators contact information
header	0..*	string	Header text
status	1..1	code	Secure messaging endpoint activation status.

9 FHIR payload samples

The data included are for example purposes only.

Organisation

```
{
  "resourceType": "Organization",
  "id": "689bf27a-b7c2-4cba-b2f9-bbc38d429999",
  "meta": {
    "lastUpdated": "2021-03-03T00:51:16.000+00:00"
  },
  "identifier": [
    {
      "type": {
        "coding": [
          {
            "code": "NHSDURI",
            "display": "NHSD Resource ID"
          }
        ]
      },
      "text": "NHSD Organization Resource Identifier"
    }
  ],
  "system": "http://fhir.nhsd.com.au/CodeSystem/nhsdIdentifiers#rid",
  "value": "689bf27a-b7c2-4cba-b2f9-bbc38d49999"
},
{
  "use": "secondary",
  "type": {
    "coding": [
      {
        "code": "ABN",
        "display": "ABN"
      }
    ]
  },
  "text": "ABN"
},
"system": "http://hl7.org.au/id/abn",
```

```

    "value": "111111111111"
  },
  {
    "type": {
      "coding": [
        {
          "system": "http://hl7.org.au/fhir/v2/0203",
          "code": "VDI",
          "display": "Vendor Directory Identifier"
        }
      ],
      "text": "NHSD Site ID - Legacy"
    },
    "system": "http://fhir.nhsd.com.au/CodeSystem/nhsdIdentifiers#siteId",
    "value": "200009999"
  }
],
"active": true,
"name": "Example Organisation",
"alias": [
  "Example Org"
],
"partOf": {
  "id": "0a906dc6-ab30-4421-8afb-fbcb19f39999",
  "reference": "Organization/0a906dc6-ab30-4421-8afb-fbcb19f39999"
},
"contact": [
  {
    "purpose": {
      "coding": [
        {
          "system": "http://hl7.org/fhir/contactentity-type",
          "code": "admin"
        }
      ]
    },
    "telecom": [
      {
        "system": "url",
        "value": "https://www.google.com/au",
        "use": "work"
      }
    ]
  },
  {
    "purpose": {
      "coding": [
        {
          "system": "http://hl7.org/fhir/contactentity-type",
          "code": "admin"
        }
      ]
    },
    "telecom": [
      {

```

```

        "system": "email",
        "value": "test@test.com.au",
        "use": "work"
      }
    ]
  },
  {
    "purpose": {
      "coding": [
        {
          "system": "http://hl7.org/fhir/contactentity-type",
          "code": "admin"
        }
      ]
    },
    "telecom": [
      {
        "system": "phone",
        "value": "03 1111 1111",
        "use": "work",
        "rank": 1
      }
    ]
  },
  {
    "purpose": {
      "coding": [
        {
          "system": "http://hl7.org/fhir/contactentity-type",
          "code": "admin"
        }
      ]
    },
    "address": {
      "extension": [
        {
          "url": "http://fhir.nhsd.com.au/StructureDefinition/address-line",
          "extension": [
            {
              "url": "line3",
              "valueString": "123 New Street"
            }
          ]
        }
      ]
    },
    "use": "work",
    "type": "physical",
    "line": [
      "123 New Street"
    ],
    "city": "MELBOURNE",
    "state": "VIC",
    "postalCode": "3000",
    "country": "AUS"
  }
}

```

```

    }
  ]
}

```

Location

```

{
  "resourceType": "Location",
  "id": "1126e98d-7e67-4cdb-acb6-aed3cb6e9999",
  "meta": {
    "lastUpdated": "2021-03-03T00:51:16.000+00:00"
  },
  "name": "NHSD test location",
  "description": "NHSD test description",
  "identifier": [
    {
      "type": {
        "coding": [
          {
            "code": "NHSDURI",
            "display": "NHSD Resource ID"
          }
        ]
      },
      "text": "NHSD Location Resource Identifier"
    },
    {
      "system": "http://fhir.nhsd.com.au/CodeSystem/nhsdIdentifiers#rid",
      "value": "1126e98d-7e67-4cdb-acb6-aed3cb6e9999"
    }
  ],
  "status": "active",
  "mode": "instance",
  "type": [
    {
      "coding": [
        {
          "system": "http://hl7.org/fhir/v3/RoleCode",
          "code": "WORK",
          "display": "work site"
        }
      ]
    }
  ],
  "address": {
    "extension": [
      {
        "url": "http://fhir.nhsd.com.au/StructureDefinition/address-line",
        "extension": [
          {
            "url": "line1",
            "valueString": "Example Line 1"
          },
          {
            "url": "line2",
            "valueString": "Example Line 3"
          }
        ]
      }
    ]
  }
}

```

```

    {
      "url": "line3",
      "valueString": "Example Line 3"
    }
  ]
},
{
  "url": "http://hl7.org.au/fhir/StructureDefinition/address-identifier",
  "valueIdentifier": {
    "type": {
      "text": "G-NAF Address Detail PID"
    },
    "system": "http://hl7.org.au/id/gnafidentifier",
    "value": "GAWA_162420999"
  }
},
],
"use": "work",
"type": "physical",
"text": "Example Line 1 Example Line 2 Example Line 3 MELBOURNE VIC 3000 Australia",
"line": [
  "Example Line 1",
  "Example Line 2",
  "Example Line 3"
],
"city": "MELBOURNE",
"state": "VIC",
"postalCode": "3000",
"country": "AUS"
},
"physicalType": {
  "coding": [
    {
      "system": "http://hl7.org/fhir/location-physical-type",
      "code": "si",
      "display": "Site"
    }
  ]
},
],
},
"position": {
  "longitude": 140.9375,
  "latitude": -37.87211914
},
"managingOrganization": {
  "id": "5581529e-6fe9-4333-9d7c-47463fb9999",
  "reference": "Organization/5581529e-6fe9-4333-9d7c-47463fb9999"
}
}
}

```

Healthcare Service

```

{
  "resourceType": "HealthcareService",
  "id": "4c8f3408-cd77-448e-9090-66b152269999",
  "meta": {

```

```

"extension": [
  {
    "url": "http://fhir.nhsd.com.au/StructureDefinition/operationalStatus",
    "extension": [
      {
        "url": "current-status",
        "valueString": "OPEN"
      }
    ]
  }
],
"lastUpdated": "2022-02-24T23:12:20.000+00:00"
},
"identifier": [
  {
    "type": {
      "coding": [
        {
          "system": "http://hl7.org.au/fhir/v2/0203",
          "code": "VDI",
          "display": "Vendor Directory Identifier"
        }
      ]
    },
    "text": "NHS Site Service ID - Legacy"
  },
  {
    "system": "http://fhir.nhsd.com.au/CodeSystem/nhsdIdentifiers#ssid",
    "value": "300049999",
    "assigner": {
      "display": "National Health Services Directory"
    }
  }
],
{
  "type": {
    "coding": [
      {
        "code": "NHSDURI",
        "display": "NHSD Resource ID"
      }
    ]
  },
  "text": "NHSD Healthcare service Resource Identifier"
},
{
  "system": "http://fhir.nhsd.com.au/CodeSystem/nhsdIdentifiers#rid",
  "value": "4c8f3408-cd77-448e-9090-66b152299999"
}
],
"active": true,
"providedBy": {
  "id": "fe4692e6-bb7c-494f-8f74-8423b4d99999",
  "reference": "Organization/fe4692e6-bb7c-494f-8f74-8423b4d99999",
  "display": "Example Organisation"
},
"type": [
  {
    "coding": [
      {

```

```

    "system": "nhsd:/reference/taxonomies/snomed-servicetype",
    "code": "1223091000168105",
    "display": "General practice service"
  }
]
},
{
  "coding": [
    {
      "system": "http://snomed.info/sct",
      "code": "1223091000168105",
      "display": "General practice service"
    }
  ]
}
],
"location": [
  {
    "id": "73761d05-1f1d-45c8-a81b-966180d99999",
    "reference": "Location/73761d05-1f1d-45c8-a81b-966180d99999"
  }
],
"telecom": [
  {
    "extension": [
      {
        "url": "http://fhir.nhsd.com.au/StructureDefinition/au-contact-purpose",
        "valueCoding": {
          "system": "http://hl7.org/fhir/contactentity-type",
          "code": "ADMIN"
        }
      }
    ]
  },
  {
    "system": "phone",
    "value": "0744445555",
    "use": "work",
    "rank": 1
  },
  {
    "extension": [
      {
        "url": "http://fhir.nhsd.com.au/StructureDefinition/au-contact-purpose",
        "valueCoding": {
          "system": "http://hl7.org/fhir/contactentity-type",
          "code": "ADMIN"
        }
      }
    ]
  },
  {
    "system": "other",
    "value": "0711112222",
    "use": "work"
  }
],
"serviceProvisionCode": [
  {

```

```

"extension": [
  {
    "url": "http://fhir.nhsd.com.au/StructureDefinition/characteristic-value",
    "valueString": "yes"
  }
],
"coding": [
  {
    "system": "http://hl7.org.au/fhir/CodeSystem/service-provision-conditions",
    "code": "FBB",
    "display": "Fees and Bulk Billing"
  }
]
},
"characteristic": [
  {
    "extension": [
      {
        "url": "http://fhir.nhsd.com.au/StructureDefinition/characteristic-group",
        "valueString": "appointments"
      },
      {
        "url": "http://fhir.nhsd.com.au/StructureDefinition/characteristic-value",
        "valueString": "yes"
      }
    ],
    "coding": [
      {
        "system": "http://fhir.nhsd.com.au/CodeSystem/rc-appointment",
        "code": "yes",
        "display": "Yes"
      }
    ]
  },
  {
    "extension": [
      {
        "url": "http://fhir.nhsd.com.au/StructureDefinition/characteristic-group",
        "valueString": "offerings"
      },
      {
        "url": "http://fhir.nhsd.com.au/StructureDefinition/characteristic-value",
        "valueString": "yes"
      }
    ],
    "coding": [
      {
        "system": "http://fhir.nhsd.com.au/CodeSystem/rc-offering",
        "code": "telehealthAvailable",
        "display": "Telehealth Available"
      }
    ]
  },
  {

```

```

"extension": [
  {
    "url": "http://fhir.nhsd.com.au/StructureDefinition/characteristic-group",
    "valueString": "facilities"
  },
  {
    "url": "http://fhir.nhsd.com.au/StructureDefinition/characteristic-value",
    "valueString": "yes"
  }
],
"coding": [
  {
    "system": "http://fhir.nhsd.com.au/CodeSystem/rc-facility",
    "code": "parkingFree",
    "display": "Free Parking"
  }
]
},
{
  "extension": [
    {
      "url": "http://fhir.nhsd.com.au/StructureDefinition/characteristic-group",
      "valueString": "facilities"
    },
    {
      "url": "http://fhir.nhsd.com.au/StructureDefinition/characteristic-value",
      "valueString": "yes"
    }
  ],
  "coding": [
    {
      "system": "http://fhir.nhsd.com.au/CodeSystem/rc-facility",
      "code": "wheelchairAccess",
      "display": "Wheelchair Access"
    }
  ]
}
],
{
  "extension": [
    {
      "url": "http://fhir.nhsd.com.au/StructureDefinition/characteristic-group",
      "valueString": "referralInformation"
    },
    {
      "url": "http://fhir.nhsd.com.au/StructureDefinition/characteristic-value",
      "valueString": "yes"
    },
    {
      "url": "http://fhir.nhsd.com.au/StructureDefinition/characteristic-extendedValues",
      "extension": [{
        "url": "note",
        "valueString": "Service accepts self referral"
      }]
    }
  ]
}

```

```

],
"coding": [
  {
    "system": "http://fhir.nhsd.com.au/CodeSystem/rc-referralInformation",
    "code": "forPublicUse",
    "display": "For Public Use"
  }
]
},
],
"appointmentRequired": true,
"availableTime": [
  {
    "extension": [
      {
        "url": "http://fhir.nhsd.com.au/StructureDefinition/availability-specificDate",
        "valueString": "1900-01-01"
      },
      {
        "url": "http://fhir.nhsd.com.au/StructureDefinition/timezone",
        "valueString": "Australia/Brisbane"
      }
    ]
  },
  {
    "daysOfWeek": [
      "mon",
      "tue",
      "wed",
      "thu",
      "fri"
    ],
    "availableStartTime": "08:00:00",
    "availableEndTime": "17:00:00"
  },
  {
    "extension": [
      {
        "url": "http://fhir.nhsd.com.au/StructureDefinition/availability-specificDate",
        "valueString": "1900-01-01"
      },
      {
        "url": "http://fhir.nhsd.com.au/StructureDefinition/timezone",
        "valueString": "Australia/Brisbane"
      }
    ]
  },
  {
    "daysOfWeek": [
      "sat",
      "sun"
    ],
    "availableStartTime": "08:30:00",
    "availableEndTime": "12:30:00"
  }
]
},
"notAvailable": [
  {
    "extension": [

```

```

{
  "url": "http://fhir.nhsd.com.au/StructureDefinition/not-availability-reasonDescription",
  "valueString": "Anzac Day"
},
{
  "url": "http://fhir.nhsd.com.au/StructureDefinition/not-availability-reasonCode",
  "valueCoding": {
    "system": "http://fhir.nhsd.com.au/CodeSystem/nationalHolidays",
    "code": "anzac_day"
  }
},
{
  "url": "http://fhir.nhsd.com.au/StructureDefinition/timezone",
  "valueString": "Australia/Brisbane"
}
],
"during": {
  "start": "2022-04-25",
  "end": "2022-04-25"
}
},
{
  "extension": [
    {
      "url": "http://fhir.nhsd.com.au/StructureDefinition/not-availability-reasonDescription",
      "valueString": "Australia Day"
    },
    {
      "url": "http://fhir.nhsd.com.au/StructureDefinition/not-availability-reasonCode",
      "valueCoding": {
        "system": "http://fhir.nhsd.com.au/CodeSystem/nationalHolidays",
        "code": "australia_day"
      }
    },
    {
      "url": "http://fhir.nhsd.com.au/StructureDefinition/timezone",
      "valueString": "Australia/Brisbane"
    }
  ],
  "during": {
    "start": "2022-01-26",
    "end": "2022-01-26"
  }
},
{
  "extension": [
    {
      "url": "http://fhir.nhsd.com.au/StructureDefinition/not-availability-reasonDescription",
      "valueString": "Boxing Day"
    },
    {
      "url": "http://fhir.nhsd.com.au/StructureDefinition/not-availability-reasonCode",
      "valueCoding": {
        "system": "http://fhir.nhsd.com.au/CodeSystem/nationalHolidays",
        "code": "boxing_day"
      }
    }
  ]
}

```

```

    }
  },
  {
    "url": "http://fhir.nhsd.com.au/StructureDefinition/timezone",
    "valueString": "Australia/Brisbane"
  }
],
"during": {
  "start": "2022-12-26",
  "end": "2022-12-26"
}
},
{
  "extension": [
    {
      "url": "http://fhir.nhsd.com.au/StructureDefinition/not-availability-reasonDescription",
      "valueString": "Christmas Day"
    },
    {
      "url": "http://fhir.nhsd.com.au/StructureDefinition/not-availability-reasonCode",
      "valueCoding": {
        "system": "http://fhir.nhsd.com.au/CodeSystem/nationalHolidays",
        "code": "christmas_day"
      }
    }
  ],
  {
    "url": "http://fhir.nhsd.com.au/StructureDefinition/timezone",
    "valueString": "Australia/Brisbane"
  }
],
"during": {
  "start": "2022-12-25",
  "end": "2022-12-25"
}
},
{
  "extension": [
    {
      "url": "http://fhir.nhsd.com.au/StructureDefinition/not-availability-reasonDescription",
      "valueString": "Christmas Day Additional Day"
    },
    {
      "url": "http://fhir.nhsd.com.au/StructureDefinition/not-availability-reasonCode",
      "valueCoding": {
        "system": "http://fhir.nhsd.com.au/CodeSystem/nationalHolidays",
        "code": "christmas_day_additional_day"
      }
    }
  ],
  {
    "url": "http://fhir.nhsd.com.au/StructureDefinition/timezone",
    "valueString": "Australia/Brisbane"
  }
],
"during": {
  "start": "2022-12-27",

```

```

    "end": "2022-12-27"
  }
},
{
  "extension": [
    {
      "url": "http://fhir.nhsd.com.au/StructureDefinition/not-availability-reasonDescription",
      "valueString": "Easter Monday"
    },
    {
      "url": "http://fhir.nhsd.com.au/StructureDefinition/not-availability-reasonCode",
      "valueCoding": {
        "system": "http://fhir.nhsd.com.au/CodeSystem/nationalHolidays",
        "code": "easter_monday"
      }
    },
    {
      "url": "http://fhir.nhsd.com.au/StructureDefinition/timezone",
      "valueString": "Australia/Brisbane"
    }
  ],
  "during": {
    "start": "2022-04-18",
    "end": "2022-04-18"
  }
},
{
  "extension": [
    {
      "url": "http://fhir.nhsd.com.au/StructureDefinition/not-availability-reasonDescription",
      "valueString": "Easter Saturday"
    },
    {
      "url": "http://fhir.nhsd.com.au/StructureDefinition/not-availability-reasonCode",
      "valueCoding": {
        "system": "http://fhir.nhsd.com.au/CodeSystem/nationalHolidays",
        "code": "easter_saturday"
      }
    },
    {
      "url": "http://fhir.nhsd.com.au/StructureDefinition/timezone",
      "valueString": "Australia/Brisbane"
    }
  ],
  "during": {
    "start": "2022-04-16",
    "end": "2022-04-16"
  }
},
{
  "extension": [
    {
      "url": "http://fhir.nhsd.com.au/StructureDefinition/not-availability-reasonDescription",
      "valueString": "Easter Sunday"
    }
  ],

```

```

{
  "url": "http://fhir.nhsd.com.au/StructureDefinition/not-availability-reasonCode",
  "valueCoding": {
    "system": "http://fhir.nhsd.com.au/CodeSystem/nationalHolidays",
    "code": "easter_sunday"
  }
},
{
  "url": "http://fhir.nhsd.com.au/StructureDefinition/timezone",
  "valueString": "Australia/Brisbane"
}
],
"during": {
  "start": "2022-04-17",
  "end": "2022-04-17"
}
},
{
  "extension": [
    {
      "url": "http://fhir.nhsd.com.au/StructureDefinition/not-availability-reasonDescription",
      "valueString": "Good Friday"
    },
    {
      "url": "http://fhir.nhsd.com.au/StructureDefinition/not-availability-reasonCode",
      "valueCoding": {
        "system": "http://fhir.nhsd.com.au/CodeSystem/nationalHolidays",
        "code": "good_friday"
      }
    },
    {
      "url": "http://fhir.nhsd.com.au/StructureDefinition/timezone",
      "valueString": "Australia/Brisbane"
    }
  ],
  "during": {
    "start": "2022-04-15",
    "end": "2022-04-15"
  }
},
{
  "extension": [
    {
      "url": "http://fhir.nhsd.com.au/StructureDefinition/not-availability-reasonDescription",
      "valueString": "New Year's Day"
    },
    {
      "url": "http://fhir.nhsd.com.au/StructureDefinition/not-availability-reasonCode",
      "valueCoding": {
        "system": "http://fhir.nhsd.com.au/CodeSystem/nationalHolidays",
        "code": "new_years_day"
      }
    },
    {
      "url": "http://fhir.nhsd.com.au/StructureDefinition/timezone",

```

```

    "valueString": "Australia/Brisbane"
  }
],
"during": {
  "start": "2022-01-01",
  "end": "2022-01-01"
}
},
{
  "extension": [
    {
      "url": "http://fhir.nhsd.com.au/StructureDefinition/not-availability-reasonDescription",
      "valueString": "New Year's Day Additional Day"
    },
    {
      "url": "http://fhir.nhsd.com.au/StructureDefinition/not-availability-reasonCode",
      "valueCoding": {
        "system": "http://fhir.nhsd.com.au/CodeSystem/nationalHolidays",
        "code": "new_years_day_additional_day"
      }
    },
    {
      "url": "http://fhir.nhsd.com.au/StructureDefinition/timezone",
      "valueString": "Australia/Brisbane"
    }
  ],
  "during": {
    "start": "2022-01-03",
    "end": "2022-01-03"
  }
}
]
}

```

Practitioner

```

{
  "resourceType": "Practitioner",
  "id": "916a4f35-bbc9-5533-b346-e69bef133a04",
  "meta": {
    "lastUpdated": "2021-01-13T12:39:02.000+00:00"
  },
  "language": "en-AU",
  "identifier": [
    {
      "type": {
        "coding": [
          {
            "system": "http://hl7.org.au/fhir/v2/0203",
            "code": "VDI",
            "display": "Vendor Directory Identifier"
          }
        ]
      },
      "text": "Legacy Practitioner ID"
    }
  ],
}

```

```

    "system" : "http://fhir.nhsd.com.au/CodeSystem/nhsdIdentifiers#praclLegacy",
    "value" : "3333333333"
  }
],
"active" : true,
"name" : [
  {
    "use" : "official",
    "text" : "Test Practitioner NHSD",
    "family" : "NHSD",
    "given" : [
      "Test",
      "Practitioner"
    ],
    "prefix" : [
      "Dr"
    ]
  }
],
"gender" : "female"
}

```

Practitioner Role

```

{
  "resourceType" : "PractitionerRole",
  "id" : "2879fa82-075a-4bd6-eacf-45e3c363e1ed",
  "language" : "en-AU",
  "identifier" : [
    {
      "use" : "official",
      "type" : {
        "coding" : [
          {
            "system" : "http://hl7.org.au/fhir/v2/0203",
            "code" : "UPIN",
            "display" : "Medicare Provider Number"
          }
        ]
      },
      "system" : "http://ns.electronichealth.net.au/id/medicare-provider-number",
      "value" : "44444444"
    }
  ],
  "active" : true,
  "practitioner" : {
    "id" : "916a4f35-bbc9-5533-b346-e69bef133a04",
    "reference" : "Practitioner/916a4f35-bbc9-5533-b346-e69bef133a04",
    "display" : "Test Practitioner NHSD"
  },
  "organization" : {
    "id" : "00851ad7-4ae1-4aca-88d0-fba3b498fb1c",
    "reference" : "Organization/00851ad7-4ae1-4aca-88d0-fba3b498fb1c"
  },
  "specialty" : [

```

```

{
  "coding" : [
    {
      "system" : "nhsd:/reference/taxonomies/snomed-specialty",
      "code" : "28229004",
      "display" : "Optometrist"
    }
  ]
},
{
  "coding" : [
    {
      "system" : "http://snomed.info/sct",
      "code" : "28229004",
      "display" : "Optometrist"
    }
  ]
},
],
"location" : [
  {
    "id" : "20f9cb78-2fea-a902-c20c-f139fe20739f",
    "reference" : "Location/20f9cb78-2fea-a902-c20c-f139fe20739f"
  }
],
"healthcareService" : [
  {
    "id" : "532245d4-6e8e-b67e-fe31-b2f82379919a ",
    "reference" : "Healthcare Service/532245d4-6e8e-b67e-fe31-b2f82379919a "
  }
]
}

```

Endpoint

```

{
  "resourceType": "Endpoint",
  "id": "a19377d0-5ede-49e7-ab3b-4f95f7c1866b",
  "meta": {
    "lastUpdated": "2024-03-14T01:34:59.000+00:00"
  },
  "managingOrganization": {
    "id": "1f7ad47f-303e-4d62-bf80-3b7cdd5cbc03",
    "reference": "Organization/1f7ad47f-303e-4d62-bf80-3b7cdd5cbc03",
    "display": "Heartful Minds"
  },
  "identifier": [
    {
      "system": "http://ns.electronichealth.net.au/smd/target",
      "value": "000AAAA"
    },
    {
      "type": {
        "coding": [
          {

```

```

      "code": "NHSDURI",
      "display": "NHSD Resource ID"
    }
  ],
  "text": "NHSD Healthcare service Resource Identifier"
},
"system": "http://fhir.nhsd.com.au/CodeSystem/nhsdIdentifiers#rid",
"value": "a19377d0-5ede-49e7-ab3b-4f95f7c1866b"
}
],
"name": "Endpoint Sample Resource",
"extension": [
  {
    "url": "http://hl7.org.au/fhir/StructureDefinition/au-receivingfacility",
    "extension": [
      {
        "url": "namespace-id",
        "valueString": "<rf-namespace-id>"
      },
      {
        "url": "universal-id",
        "valueString": "<rf-universal-id>"
      },
      {
        "url": "universal-id-type",
        "valueString": "<rf-universal-id-type>"
      }
    ]
  },
  {
    "url": "http://hl7.org.au/fhir/StructureDefinition/au-receivingapplication",
    "extension": [
      {
        "url": "namespace-id",
        "valueString": "<ra-namespace-id>"
      },
      {
        "url": "universal-id",
        "valueString": "<ra-universal-id>"
      },
      {
        "url": "universal-id-type",
        "valueString": "<ra-universal-id-type>"
      }
    ]
  },
  {
    "url": "http://hl7.org.au/fhir/StructureDefinition/encryption-certificate-pem-x509",
    "valueString": "-----BEGIN CERTIFICATE-----
\nMIIFJzCCBJCgAwIBAgICV8EwDQYJKoZIhvcNAQEFBQAwwY0xEjAQBgoJkiaJk/IsZAEZFgJhdT
ETMBEGCgmSJomT8ixkARkWA2NvbTEWMBQGA1UECgwNR2xvYmFsLUhYVWx0aDEUMBIGA1
UECwwLUmVmZXJyYWxvOZXXQxNDAYBgNVBAMMK1JIZmVybVybXMTYW5kLWNvbmRpdGlbnMv
MA0GCSqGSIb3DQEBBQUAA4GBAG0YbQQZ4xF92cfBJPLspabzADjelcRqvO3mT5AZ8dXfDPUMu

```

```

8jBiFF1SINh/UakXshU0ZrUaX05M2UT+rMDed15Ad7zMP99s0TFfraU5KuRLWNsFjAiD2cyYu7Q72
zpMPHvn3YhO5iOuaHPtHSziGk9flI7Eq0vzCdHt51P2ZPXJ\n-----END CERTIFICATE-----\n"
  }
],
"address": "<URL address of the endpoint>",
"connectionType":
{
  "system": "http://hl7.org.au/fhir/CodeSystem/smd-interfaces",
  "code": "http://ns.electronichealth.net.au/smd/intf/SealedMessageDelivery/TLS/2010",
  "display": "Sealed Message Delivery"
},
"payloadType": [
{
  "coding": [
    {
      "system": "http://hl7.org.au/fhir/CodeSystem/endpoint-payload-type",
      "code": "http://ns.electronichealth.net.au/ack/sc/deliver/hl7Ack/2012",
      "display": "HL7 V2 Acknowledgment"
    }
  ]
}
],
"payloadMimeType": [
  "application/hl7-v2"
],
"contact": [
  {
    "system": "email",
    "value": "<sm-email-address>",
    "use": "work"
  }
],
"status": "active"
}

```