



TiredofCancer

Interoperability & Data export

Untire®

| | | |
|----------------------|-------------------|------------------------|
| Author: | Geert Stuut | Developer lead Backend |
| | Atse Aukes | Chief Growth Officer |
| Version: | 05-05-2023 | |
| Data classification: | Classified | |

©2023 Tired of Cancer B.V.



An app that helps with cancer fatigue

Index

| | |
|---|-----------|
| 1. Introduction | 3 |
| 1.1 General | 3 |
| 1.2 Objective | 3 |
| 1.3 Target audience | 3 |
| 1.4 Scope | 3 |
| 2. Export format | 4 |
| 2.1 Data grouping | 4 |
| 2.2 Data format | 4 |
| 3. Export description | 5 |
| 3.1 Data export in human-readable, printable format – PDF | 5 |
| 3.2 Data export in human-readable, printable format – CSV | 5 |
| 3.2 Data export in machine-readable, interoperable format | 7 |
| 4. Document control | 49 |

1. Introduction

1.1 General

This document is a description of the data export used by Untire®. Untire® aims to reduce fatigue in cancer patients and survivors and improve their quality of life.

This goal is achieved through a combination of interventions:

- Providing insight into the current health situation, e.g. based on experienced fatigue/burden/dissatisfaction/happiness levels, energy levels, mental wellbeing
- Daily physical activity programme to increase fitness, improve muscle strength and general exercise routine (e.g. reduce sitting habits)
- Daily activity programme, which supports patients in managing their energy on a daily basis
- Daily activity programme to improve patients' individual psychological mood through individual behaviour suggestions
- Daily activity programme with exercises to reduce stress (e.g. breathing exercises)
- Psycho-education based on cognitive behavioural theory to support patients, including sleep issues, anxiety problems, self-care, nutrition, worrying, and more.

The content of Untire® is in line with the international guidelines for the diagnosis and treatment of cancer-related fatigue from the NCCN (National Comprehensive Cancer Network - USA).

1.2 Objective

This document and its specifications are intended to enable other manufacturers of digital products to further process a patient's data in Untire® through a machine-readable, interoperable format.

1.3 Target audience

This document is intended for providers, manufacturers, auditors, assessors and developers of digital health applications, especially in the field of oncology.

1.4 Scope

This document applies to the specification of technical and syntactical interoperability within the meaning of §§ 5 and 6 DiGAV.

2. Export format

2.1 Data grouping

The exported data is based on user inputs and activities in Untire®. Specifically, the following data types can be defined and categorised in the Untire®:

| Types | Description | Category |
|----------------------|--|----------------------|
| Fatigue | Mapping level of fatigue | Measurements |
| Happiness | Mapping level of happiness | Measurements |
| Energy | Mapping level of energy | Measurements |
| Goals | Mapping goal of app use | Goal |
| Goal progress | The progress of a goal | Goal |
| Goal priority | The priority of the goal | Goal |
| Energy in | Mapping activities that energise the user | Vase of Energy |
| Energy out | Mapping activities that cost the user energy. | Vase of Energy |
| Energy leak | Mapping activities that leak user energy. | Vase of Energy |
| Reflection exercises | User responses to reflection questions in the app. | Reflection exercises |
| First name | First name of the user | Patient |
| Country | Country of origin of the user | Patient |
| Language | Language of the user | Patient |
| PID | Internal Patient identifier | Patient |

2.2 Data format

Data export in human-readable, printable format

The data is exported in both csv format and PDF. The data is only accessed by the patient through an export function via Untire®.

Data export in machine-readable, interoperable format

This export is based on the Diga Toolkit, issued by the KBV.

[DiGA Toolkit 1.1.0 - DiGA Toolkit 1.1.0 - MIO \(kbv.de\)](#)

3. Export description

3.1 Data export in human-readable, printable format – PDF

This PDF export, format which also complies to Art. 20 GDPR, exports all data of a user into a PDF. It contains the following elements:

- Name
- Start date Untire
- Measurements: fatigue, happiness per date
- Goals: actual goal, priority and progress
- Vase of energy: energy value, in/out/leak per date
- Refectionsteps: questions, answer

3.2 Data export in human-readable, printable format – CSV

Measurements

CSV export of the measurements Fatigue and Happiness

Example

| user_id,date,time,assessment_type,value |
|---|
| 100,2020-01-01,20:00:00,HAPPINESS,43 |
| 100,2020-01-01,20:00:30,FATIGUE,72 |

| Field Identifier | Description | Format | Validation |
|------------------|--------------------------|---------------------|-------------------|
| user_id | Internal User ID | String | |
| date | Date of entry | Date | yyyy:mm:dd |
| time | Time of entry | Time | hh:mm:ss |
| assessment_type | Measurement | Fatigue Happiness | |
| value | Score of Assessment type | Value | Between 0 and 100 |

Goals

CSV export of the goals

Example

| user_id,datetime,goal{goal,uuid,importanceValue,value} |
|---|
| 100,2020-01-01,20:00:00, {"goal":"Advice and getting support",uuid:"e84711c7-d2d6-4d34-9ef0-3cb76c77ffb6",importanceValue:65,"value":47}} |

| Field Identifier | Description | Format | Validation |
|------------------|------------------|--------|-------------------|
| user_id | Internal User ID | String | |
| date | Date of entry | Date | yyyy:mm:dd |
| time | Time of entry | Time | hh:mm:ss |
| goal | Goal | String | |
| uuid | ID of Goal | String | |
| importanceValue | Priority | Value | Between 0 and 100 |
| value | Progress | Value | Between 0 and 100 |

Reflection steps

CSV export of all reflection steps.

Example

| user_id,date_time,body,Question,description |
|---|
|---|

682,2021-09-10T13:06:17.926+02:00,No expectations,Q: your expectations,"What do you expect form the app?"

682,2021-09-10T13:07:10.911+02:00,No routine,Q: Sleeping routine,"Do you have a routine before you go to sleep? Describe your routine."

| Field Identifier | Description | Format | Validation |
|------------------|--------------------------------------|-----------|-----------------------------------|
| User_id | ID of input | String | |
| Date_time | Date and time of input | Date Time | DD-MM-YYYY THH:MM:SS.000+HH:MM |
| Body | Input of a reflection step | String | |
| Question | Question of reflection step | String | |
| Description | Description attached to the question | String | |

Vase of Energy

CSV, export of the Vase of Energy

Example

User_id,date_time,value,in,out,leak

682,2021-09-10T10:20:01.000+02:00,74,Yoga,Household,Pain

683,2021-09-10T09:20:46.000+02:00,34,Family,Work,Itching

| Field Identifier | Description | Format | Validation |
|------------------|--------------------------|----------------------------|-----------------------------------|
| user_id | Internal User ID - Vault | String | |
| date_time | Date&time of entry | Date Time | DD-MM-YYYY THH:MM:SS.000+HH:MM |
| value | Energy measurement | Value | Between 0 and 100 |
| in | Vase IN input | Boolean selectbox + String | |
| out | Vase OUT input | Boolean selectbox + String | |
| leak | Vase LEAK input | Boolean selectbox + String | |

3.2 Data export in machine-readable, interoperable format

The data export in machine-readable, interoperable format is based on the Diga toolkit; [DiGA Toolkit 1.1.0 - DiGA Toolkit 1.1.0 - MIO \(kbv.de\)](#)

Implementation

Two export profiles are available in two formats; JSON and XML. The bundle is being used a container that contains all relevant elements.

Example JSON

```
{
  "id": "c030cf49-73a0-4349-ab4d-038e5ff360f3",
  "meta": {
    "versionId": "1.0",
    "lastUpdated": "2023-05-18T00:00:00.000Z",
    "profile": [
      "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Bundle|1.1.0"
    ]
  },
  "resourceType": "Bundle",
  "identifier": {
    "type": {
      "coding": [
        {
          "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
          "version": "2.9",
          "code": "RI",
          "display": "Resource identifier"
        }
      ]
    },
    "system": "urn:ietf:rhc:3986",
    "value": "urn:uuid:c030cf49-73a0-4349-ab4d-038e5ff360f3"
  },
  "type": "document",
  "timestamp": "2023-05-31T11:02:02.686Z",
  "entry": [
    {
      "fullUrl": "urn:uuid:d3c0f779-e55d-48a2-8de9-c9f5fa9fbf7a",
      "resource": {
        "resourceType": "Composition",
        "meta": {
          "versionId": "1.0",
          "lastUpdated": "2023-05-18T00:00:00.000Z",
          "profile": [
            "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Composition|1.1.0"
          ]
        },
        "extension": [
          {
            "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_MIO_DIGA_Betrachtungszeitraum",
            "valuePeriod": {
              "start": "2023-05-31T11:02:02.686Z",
              "end": "2023-05-31T11:02:02.686Z"
            }
          }
        ]
      }
    }
  ]
}
```

```

    }
  ],
  "status": "final",
  "type": {
    "coding": [
      {
        "system": "http://loinc.org",
        "version": "2.72",
        "code": "53576-5",
        "display": "Personal health monitoring report Document"
      }
    ]
  },
  "subject": [
    {
      "reference": "urn:uuid:c5d28810-60e8-493d-8732-83be79b742f0"
    }
  ],
  "date": "2023-05-31T11:02:02.686Z",
  "author": [
    {
      "reference": "urn:uuid:3b68b101-7004-4c43-b19a-11aba61459ec"
    }
  ],
  "title": "DiGA-Export",
  "section": [
    {
      "title": "Aktivitäten",
      "code": {
        "coding": [
          {
            "system": "https://fhir.kbv.de/CodeSystem/KBV_CS_MIO_DIGA_Section_Codes",
            "version": "1.1.0",
            "code": "SectionAktivitaeten",
            "display": "Bereich Aktivitäten"
          }
        ]
      }
    }
  ],
  "entry": [
    {
      "reference": "urn:uuid:2a5ed998-447e-47ee-b442-e347617f802c"
    },
    {
      "reference": "urn:uuid:a5e3376e-69f1-4993-935e-1442e871cc96"
    },
    {
      "reference": "urn:uuid:57414146-ee9-4e6e-85cb-686bd7856658"
    },
    {
      "reference": "urn:uuid:35c55f38-a1a1-4884-ace2-7b41a491c65f"
    },
    {
      "reference": "urn:uuid:a3b38d58-7dca-4681-9bc5-07fa819faf83"
    },
    {
      "reference": "urn:uuid:d4b9cd02-ca3d-4ef9-a071-c8db98015d1c"
    }
  ]

```

```

    }
  ]
},
{
  "title": "Ziele",
  "code": {
    "coding": [
      {
        "system": "https://fhir.kbv.de/CodeSystem/KBV_CS_MIO_DIGA_Section_Codes",
        "version": "1.1.0",
        "code": "SectionZiele",
        "display": "Bereich Ziele"
      }
    ]
  },
  "entry": [
    {
      "reference": "urn:uuid:e0488d69-a3a4-4fca-a164-09795f57fa07"
    },
    {
      "reference": "urn:uuid:b8a44d03-287e-43a8-93d4-4a241d5aa290"
    },
    {
      "reference": "urn:uuid:e2f2b97e-8f50-4656-be02-617df950943d"
    },
    {
      "reference": "urn:uuid:344a738a-646c-42f8-8018-7c706048aa2b"
    }
  ]
},
{
  "title": "Anhaenge",
  "code": {
    "coding": [
      {
        "system": "https://fhir.kbv.de/CodeSystem/KBV_CS_MIO_DIGA_Section_Codes",
        "version": "1.1.0",
        "code": "SectionAnhhaenge",
        "display": "Bereich Anhänge"
      }
    ]
  },
  "entry": [
    {
      "reference": "urn:uuid:6054594b-5606-4fe8-ba52-4e6c4bb10772"
    },
    {
      "reference": "urn:uuid:e111835e-a29a-4a98-8b1e-676b86988e29"
    }
  ]
}
],
{
  "fullUrl": "urn:uuid:6054594b-5606-4fe8-ba52-4e6c4bb10772",

```

```

"resource": {
  "resourceType": "Device",
  "meta": {
    "versionId": "1.0",
    "lastUpdated": "2023-05-18T00:00:00.000Z",
    "profile": [
      "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Device_DIGA|1.1.0"
    ]
  },
  "identifier": [
    {
      "use": "official",
      "type": {
        "coding": [
          {
            "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
            "version": "2.9",
            "code": "RI",
            "display": "Resource identifier"
          }
        ]
      },
      "system": "urn:ietf:rhc:3986",
      "value": "urn:uuid:6054594b-5606-4fe8-ba52-4e6c4bb10772"
    }
  ],
  "definition": {
    "reference": {
      "reference": "urn:uuid:e111835e-a29a-4a98-8b1e-676b86988e29"
    }
  },
  "type": [
    {
      "coding": [
        {
          "system": "http://fhir.de/CodeSystem/ifa/pzn",
          "code": "999999999"
        }
      ]
    }
  ]
},
{
  "fullUrl": "urn:uuid:e111835e-a29a-4a98-8b1e-676b86988e29",
  "resource": {
    "resourceType": "DeviceDefinition",
    "meta": {
      "versionId": "1.0",
      "lastUpdated": "2023-05-18T00:00:00.000Z",
      "profile": [
        "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_DeviceDefinition_DIGA|1.1.0"
      ]
    },
    "identifier": [
      {

```

```

    "type": {
      "coding": [
        {
          "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
          "version": "2.9",
          "code": "RI",
          "display": "Resource identifier"
        }
      ]
    },
    "system": "urn:ietf:rhc:3986",
    "value": "urn:uuid:e111835e-a29a-4a98-8b1e-676b86988e29"
  }
}
},
{
  "fullUrl": "urn:uuid:c5d28810-60e8-493d-8732-83be79b742f0",
  "resource": {
    "meta": {
      "versionId": "1.0",
      "lastUpdated": "2023-05-18T00:00:00.000Z",
      "profile": [
        "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Patient|1.1.0"
      ]
    },
    "resourceType": "Patient",
    "identifier": [
      {
        "use": "official",
        "type": {
          "coding": [
            {
              "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
              "version": "2.9",
              "code": "RI",
              "display": "Resource identifier"
            }
          ]
        },
        "system": "urn:ietf:rhc:3986",
        "value": "urn:uuid:c5d28810-60e8-493d-8732-83be79b742f0"
      }
    ],
    "name": [
      {
        "use": "official",
        "text": "test80",
        "family": "test80"
      }
    ],
    "gender": "unknown"
  }
},
{
  "fullUrl": "urn:uuid:3b68b101-7004-4c43-b19a-11aba61459ec",

```

```

"resource": {
  "resourceType": "Organization",
  "meta": {
    "versionId": "1.0",
    "lastUpdated": "2023-05-18T00:00:00.000Z",
    "profile": [
      "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Organization/1.1.0"
    ]
  },
  "identifier": [
    {
      "type": {
        "coding": [
          {
            "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
            "version": "2.9",
            "code": "RI",
            "display": "Resource identifier"
          }
        ]
      },
      "system": "urn:ietf:rhc:3986",
      "value": "urn:uuid:3b68b101-7004-4c43-b19a-11aba61459ec"
    }
  ]
},
{
  "fullUrl": "urn:uuid:2a5ed998-447e-47ee-b442-e347617f802c",
  "resource": {
    "meta": {
      "versionId": "1.0",
      "lastUpdated": "2023-05-18T00:00:00.000Z",
      "profile": [
        "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Observation_Free/1.1.0"
      ]
    },
    "resourceType": "Observation",
    "identifier": [
      {
        "use": "official",
        "type": {
          "coding": [
            {
              "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
              "version": "2.9",
              "code": "RI",
              "display": "Resource identifier"
            }
          ]
        },
        "system": "urn:ietf:rhc:3986",
        "value": "urn:uuid:2a5ed998-447e-47ee-b442-e347617f802c"
      }
    ],
    "status": "final",

```

```

"category": [
  {
    "coding": [
      {
        "system": "http://terminology.hl7.org/CodeSystem/observation-category",
        "version": "0.1.0",
        "code": "activity",
        "display": "Activity"
      }
    ]
  }
],
"code": {
  "coding": [
    {
      "system": "http://snomed.info/sct",
      "version": "http://snomed.info/sct/900000000000207008/version/20230131",
      "code": "112080002",
      "display": "Cheerful mood (finding)"
    },
    {
      "system": "http://snomed.info/sct",
      "version": "http://snomed.info/sct/900000000000207008/version/20230131",
      "code": "405152002",
      "display": "Quality of life satisfaction"
    }
  ]
},
"subject": {
  "reference": "Patient/e7c50926-d548-4a81-8f79-1f39c2c9d399"
},
"issued": "2023-05-04T12:14:56.000Z",
"valueInteger": 62,
"referenceRange": [
  {
    "low": {
      "value": 0
    },
    "high": {
      "value": 100
    }
  }
]
},
{
  "fullUrl": "urn:uuid:a5e3376e-69f1-4993-935e-1442e871cc96",
  "resource": {
    "meta": {
      "versionId": "1.0",
      "lastUpdated": "2023-05-18T00:00:00.000Z",
      "profile": [
        "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Observation_Free/1.1.0"
      ]
    },
    "resourceType": "Observation",

```

```
"identifier": [
  {
    "use": "official",
    "type": {
      "coding": [
        {
          "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
          "version": "2.9",
          "code": "RI",
          "display": "Resource identifier"
        }
      ]
    },
    "system": "urn:ietf:rfc:3986",
    "value": "urn:uuid:a5e3376e-69f1-4993-935e-1442e871cc96"
  },
  {
    "status": "final",
    "category": [
      {
        "coding": [
          {
            "system": "http://terminology.hl7.org/CodeSystem/observation-category",
            "version": "0.1.0",
            "code": "activity",
            "display": "Activity"
          }
        ]
      }
    ],
    "code": {
      "coding": [
        {
          "system": "http://snomed.info/sct",
          "version": "http://snomed.info/sct/900000000000207008/version/20230131",
          "code": "440398005",
          "display": "Level of fatigue (observable entity)"
        },
        {
          "system": "http://snomed.info/sct",
          "version": "http://snomed.info/sct/900000000000207008/version/20230131",
          "code": "359755007",
          "display": "Energy / stamina (observable entity)"
        }
      ]
    },
    "subject": {
      "reference": "Patient/e7c50926-d548-4a81-8f79-1f39c2c9d399"
    },
    "issued": "2023-05-04T12:14:55.000Z",
    "valueInteger": 37,
    "referenceRange": [
      {
        "low": {
          "value": 0
        }
      }
    ]
  }
],
```

```

    "high": {
      "value": 100
    }
  }
}
},
{
  "fullUrl": "urn:uuid:57414146-eec9-4e6e-85cb-686bd7856658",
  "resource": {
    "meta": {
      "versionId": "1.0",
      "lastUpdated": "2023-05-18T00:00:00.000Z",
      "profile": [
        "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Observation_Free|1.1.0"
      ]
    },
    "resourceType": "Observation",
    "identifier": [
      {
        "use": "official",
        "type": {
          "coding": [
            {
              "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
              "version": "2.9",
              "code": "RI",
              "display": "Resource identifier"
            }
          ]
        },
        "system": "urn:ietf:rhc:3986",
        "value": "urn:uuid:57414146-eec9-4e6e-85cb-686bd7856658"
      }
    ],
    "status": "final",
    "category": [
      {
        "coding": [
          {
            "system": "http://terminology.hl7.org/CodeSystem/observation-category",
            "version": "0.1.0",
            "code": "activity",
            "display": "Activity"
          }
        ]
      }
    ],
    "code": {
      "coding": [
        {
          "system": "http://snomed.info/sct",
          "version": "http://snomed.info/sct/9000000000000207008/version/20230131",
          "code": "112080002",
          "display": "Cheerful mood (finding)"
        }
      ]
    },
  },

```

```
{
  "system": "http://snomed.info/sct",
  "version": "http://snomed.info/sct/900000000000207008/version/20230131",
  "code": "405152002",
  "display": "Quality of life satisfaction"
}
],
"subject": {
  "reference": "Patient/e7c50926-d548-4a81-8f79-1f39c2c9d399"
},
"issued": "2023-05-04T12:14:07.000Z",
"valueInteger": 66,
"referenceRange": [
  {
    "low": {
      "value": 0
    },
    "high": {
      "value": 100
    }
  }
]
},
{
  "fullUrl": "urn:uuid:35c55f38-a1a1-4884-ace2-7b41a491c65f",
  "resource": {
    "meta": {
      "versionId": "1.0",
      "lastUpdated": "2023-05-18T00:00:00.000Z",
      "profile": [
        "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Observation_Free/1.1.0"
      ]
    },
    "resourceType": "Observation",
    "identifier": [
      {
        "use": "official",
        "type": {
          "coding": [
            {
              "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
              "version": "2.9",
              "code": "RI",
              "display": "Resource identifier"
            }
          ]
        }
      }
    ],
    "system": "urn:ietf:rfc:3986",
    "value": "urn:uuid:35c55f38-a1a1-4884-ace2-7b41a491c65f"
  }
},
"status": "final",
"category": [
  {

```

```

    "coding": [
      {
        "system": "http://terminology.hl7.org/CodeSystem/observation-category",
        "version": "0.1.0",
        "code": "activity",
        "display": "Activity"
      }
    ]
  },
  "code": {
    "coding": [
      {
        "system": "http://snomed.info/sct",
        "version": "http://snomed.info/sct/900000000000207008/version/20230131",
        "code": "440398005",
        "display": "Level of fatigue (observable entity)"
      },
      {
        "system": "http://snomed.info/sct",
        "version": "http://snomed.info/sct/900000000000207008/version/20230131",
        "code": "359755007",
        "display": "Energy / stamina (observable entity)"
      }
    ]
  },
  "subject": {
    "reference": "Patient/e7c50926-d548-4a81-8f79-1f39c2c9d399"
  },
  "issued": "2023-05-04T12:14:06.000Z",
  "valueInteger": 0,
  "referenceRange": [
    {
      "low": {
        "value": 0
      },
      "high": {
        "value": 100
      }
    }
  ]
},
{
  "fullUrl": "urn:uuid:a3b38d58-7dca-4681-9bc5-07fa819faf83",
  "resource": {
    "meta": {
      "versionId": "1.0",
      "lastUpdated": "2023-05-18T00:00:00.000Z",
      "profile": [
        "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Observation_Free/1.1.0"
      ]
    },
    "resourceType": "Observation",
    "identifier": [
      {

```

```

    "use": "official",
    "type": {
      "coding": [
        {
          "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
          "version": "2.9",
          "code": "RI",
          "display": "Resource identifier"
        }
      ]
    },
    "system": "urn:ietf:rhc:3986",
    "value": "urn:uuid:a3b38d58-7dca-4681-9bc5-07fa819faf83"
  },
  "status": "final",
  "category": [
    {
      "coding": [
        {
          "system": "http://terminology.hl7.org/CodeSystem/observation-category",
          "version": "0.1.0",
          "code": "activity",
          "display": "Activity"
        }
      ]
    }
  ],
  "code": {
    "coding": [
      {
        "system": "http://snomed.info/sct",
        "version": "http://snomed.info/sct/9000000000000207008/version/20230131",
        "code": "359755007",
        "display": "Energy / stamina (observable entity)"
      },
      {
        "system": "http://snomed.info/sct",
        "version": "http://snomed.info/sct/9000000000000207008/version/20230131",
        "code": "406202006",
        "display": "Energy observable (observable entity)"
      }
    ]
  },
  "subject": {
    "reference": "Patient/e7c50926-d548-4a81-8f79-1f39c2c9d399"
  },
  "issued": "2023-05-04T12:15:04.000Z",
  "valueInteger": 63,
  "referenceRange": [
    {
      "low": {
        "value": 0
      },
      "high": {
        "value": 100
      }
    }
  ]

```



```

    }
  },
],
"component": [
{
  "code": {
    "coding": [
      {
        "system": "http://loinc.org",
        "version": "2.71",
        "code": "51855-5",
        "display": "Patient note"
      }
    ],
    "text": "in"
  },
  "valueString": "Family"
},
{
  "code": {
    "coding": [
      {
        "system": "http://loinc.org",
        "version": "2.71",
        "code": "51855-5",
        "display": "Patient note"
      }
    ],
    "text": "in"
  },
  "valueString": "Social contact"
},
{
  "code": {
    "coding": [
      {
        "system": "http://loinc.org",
        "version": "2.71",
        "code": "51855-5",
        "display": "Patient note"
      }
    ],
    "text": "in"
  },
  "valueString": "Cycling"
},
{
  "code": {
    "coding": [
      {
        "system": "http://loinc.org",
        "version": "2.71",
        "code": "51855-5",
        "display": "Patient note"
      }
    ]
  },

```



```

    "text": "out"
  },
  "valueString": "Family"
},
{
  "code": {
    "coding": [
      {
        "system": "http://loinc.org",
        "version": "2.71",
        "code": "51855-5",
        "display": "Patient note"
      }
    ]
  },
  "text": "out"
},
  "valueString": "Negative people"
},
{
  "code": {
    "coding": [
      {
        "system": "http://loinc.org",
        "version": "2.71",
        "code": "51855-5",
        "display": "Patient note"
      }
    ]
  },
  "text": "leak"
},
  "valueString": "Gloominess"
},
{
  "code": {
    "coding": [
      {
        "system": "http://loinc.org",
        "version": "2.71",
        "code": "51855-5",
        "display": "Patient note"
      }
    ]
  },
  "text": "leak"
},
  "valueString": "Fear"
},
{
  "code": {
    "coding": [
      {
        "system": "http://loinc.org",
        "version": "2.71",
        "code": "51855-5",
        "display": "Patient note"
      }
    ]
  },

```

```

    "text": "leak"
  },
  "valueString": "Sleeping problems"
},
{
  "code": {
    "coding": [
      {
        "system": "http://loinc.org",
        "version": "2.71",
        "code": "51855-5",
        "display": "Patient note"
      }
    ],
    "text": "leak"
  },
  "valueString": "Financial concerns"
},
{
  "code": {
    "coding": [
      {
        "system": "http://loinc.org",
        "version": "2.71",
        "code": "51855-5",
        "display": "Patient note"
      }
    ],
    "text": "leak"
  },
  "valueString": "Shortness of breath"
}
]
},
{
  "fullUrl": "urn:uuid:d4b9cd02-ca3d-4ef9-a071-c8db98015d1c",
  "resource": {
    "meta": {
      "versionId": "1.0",
      "lastUpdated": "2023-05-18T00:00:00.000Z",
      "profile": [
        "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Observation_Free/1.1.0"
      ]
    },
    "resourceType": "Observation",
    "identifier": [
      {
        "use": "official",
        "type": {
          "coding": [
            {
              "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
              "version": "2.9",
              "code": "RI",
              "display": "Resource identifier"
            }
          ]
        }
      }
    ]
  }
}

```

```

    }
  ]
},
"system": "urn:ietf:rfc:3986",
"value": "urn:uuid:d4b9cd02-ca3d-4ef9-a071-c8db98015d1c"
}
],
"status": "final",
"category": [
{
  "coding": [
    {
      "system": "http://terminology.hl7.org/CodeSystem/observation-category",
      "version": "0.1.0",
      "code": "activity",
      "display": "Activity"
    }
  ]
}
],
"code": {
  "coding": [
    {
      "system": "http://snomed.info/sct",
      "version": "http://snomed.info/sct/900000000000207008/version/20230131",
      "code": "359755007",
      "display": "Energy / stamina (observable entity)"
    },
    {
      "system": "http://snomed.info/sct",
      "version": "http://snomed.info/sct/900000000000207008/version/20230131",
      "code": "406202006",
      "display": "Energy observable (observable entity)"
    }
  ]
},
"subject": {
  "reference": "Patient/e7c50926-d548-4a81-8f79-1f39c2c9d399"
},
"issued": "2023-05-04T12:14:21.000Z",
"valueInteger": 54,
"referenceRange": [
{
  "low": {
    "value": 0
  },
  "high": {
    "value": 100
  }
}
],
"component": [
{
  "code": {
    "coding": [
    {

```

```

    "system": "http://loinc.org",
    "version": "2.71",
    "code": "51855-5",
    "display": "Patient note"
  }
},
"text": "in"
},
"valueString": "Family"
},
{
  "code": {
    "coding": [
      {
        "system": "http://loinc.org",
        "version": "2.71",
        "code": "51855-5",
        "display": "Patient note"
      }
    ],
    "text": "in"
  },
  "valueString": "Social contact"
},
{
  "code": {
    "coding": [
      {
        "system": "http://loinc.org",
        "version": "2.71",
        "code": "51855-5",
        "display": "Patient note"
      }
    ],
    "text": "in"
  },
  "valueString": "Cycling"
},
{
  "code": {
    "coding": [
      {
        "system": "http://loinc.org",
        "version": "2.71",
        "code": "51855-5",
        "display": "Patient note"
      }
    ],
    "text": "out"
  },
  "valueString": "Family"
},
{
  "code": {
    "coding": [
      {

```

```

      "system": "http://loinc.org",
      "version": "2.71",
      "code": "51855-5",
      "display": "Patient note"
    }
  ],
  "text": "out"
},
"valueString": "Negative people"
},
{
  "code": {
    "coding": [
      {
        "system": "http://loinc.org",
        "version": "2.71",
        "code": "51855-5",
        "display": "Patient note"
      }
    ],
    "text": "leak"
  },
  "valueString": "Financial concerns"
},
{
  "code": {
    "coding": [
      {
        "system": "http://loinc.org",
        "version": "2.71",
        "code": "51855-5",
        "display": "Patient note"
      }
    ],
    "text": "leak"
  },
  "valueString": "Shortness of breath"
}
]
},
{
  "fullUrl": "urn:uuid:e0488d69-a3a4-4fca-a164-09795f57fa07",
  "resource": {
    "meta": {
      "versionId": "1.0",
      "lastUpdated": "2023-05-18T00:00:00.000Z",
      "profile": [
        "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Goal/1.1.0"
      ]
    },
    "resourceType": "Goal",
    "identifier": [
      {
        "type": {
          "coding": [

```

```
{
  "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
  "version": "2.9",
  "code": "RI",
  "display": "Resource identifier"
}
],
"system": "urn:ietf:rfc:3986",
"value": "urn:uuid:e0488d69-a3a4-4fca-a164-09795f57fa07"
},
"lifecycleStatus": "completed",
"achievementStatus": {
  "coding": [
    {
      "system": "http://terminology.hl7.org/CodeSystem/goal-achievement",
      "version": "4.0.1",
      "code": "achieved",
      "display": "Achieved"
    }
  ]
},
"priority": {
  "coding": [
    {
      "system": "http://terminology.hl7.org/CodeSystem/goal-priority",
      "version": "0.1.0",
      "code": "high-priority",
      "display": "High Priority"
    }
  ]
},
"description": {
  "coding": [
    {
      "system": "http://loinc.org",
      "version": "2.69",
      "code": "87528-6",
      "display": "Personal health goal"
    }
  ]
},
"text": "Do voluntary work"
},
"subject": {
  "reference": "Patient/e7c50926-d548-4a81-8f79-1f39c2c9d399"
}
},
{
  "fullUrl": "urn:uuid:b8a44d03-287e-43a8-93d4-4a241d5aa290",
  "resource": {
    "meta": {
      "versionId": "1.0",
      "lastUpdated": "2023-05-18T00:00:00.000Z",
      "profile": [
```

```

    "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Goal/1.1.0"
  }
},
"resourceType": "Goal",
"identifier": [
  {
    "type": {
      "coding": [
        {
          "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
          "version": "2.9",
          "code": "RI",
          "display": "Resource identifier"
        }
      ]
    },
    "system": "urn:ietf:rhc:3986",
    "value": "urn:uuid:b8a44d03-287e-43a8-93d4-4a241d5aa290"
  }
],
"lifecycleStatus": "active",
"achievementStatus": {
  "coding": [
    {
      "system": "http://terminology.hl7.org/CodeSystem/goal-achievement",
      "version": "4.0.1",
      "code": "in-progress",
      "display": "In Progress"
    }
  ]
},
"priority": {
  "coding": [
    {
      "system": "http://terminology.hl7.org/CodeSystem/goal-priority",
      "version": "0.1.0",
      "code": "high-priority",
      "display": "High Priority"
    }
  ]
},
"description": {
  "coding": [
    {
      "system": "http://loinc.org",
      "version": "2.69",
      "code": "87528-6",
      "display": "Personal health goal"
    }
  ]
},
"text": "Improved quality of life"
},
"subject": {
  "reference": "Patient/e7c50926-d548-4a81-8f79-1f39c2c9d399"
}
}

```

```

},
{
  "fullUrl": "urn:uuid:e2f2b97e-8f50-4656-be02-617df950943d",
  "resource": {
    "meta": {
      "versionId": "1.0",
      "lastUpdated": "2023-05-18T00:00:00.000Z",
      "profile": [
        "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Goal/1.1.0"
      ]
    },
    "resourceType": "Goal",
    "identifier": [
      {
        "type": {
          "coding": [
            {
              "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
              "version": "2.9",
              "code": "RI",
              "display": "Resource identifier"
            }
          ]
        },
        "system": "urn:ietf:rfc:3986",
        "value": "urn:uuid:e2f2b97e-8f50-4656-be02-617df950943d"
      }
    ],
    "lifecycleStatus": "active",
    "achievementStatus": {
      "coding": [
        {
          "system": "http://terminology.hl7.org/CodeSystem/goal-achievement",
          "version": "4.0.1",
          "code": "in-progress",
          "display": "In Progress"
        }
      ]
    },
    "priority": {
      "coding": [
        {
          "system": "http://terminology.hl7.org/CodeSystem/goal-priority",
          "version": "0.1.0",
          "code": "medium-priority",
          "display": "Medium Priority"
        }
      ]
    },
    "description": {
      "coding": [
        {
          "system": "http://loinc.org",
          "version": "2.69",
          "code": "87528-6",
          "display": "Personal health goal"
        }
      ]
    }
  }
}

```

```

    }
  },
  "text": "To feel happier"
},
"subject": {
  "reference": "Patient/e7c50926-d548-4a81-8f79-1f39c2c9d399"
}
}
},
{
  "fullUrl": "urn:uuid:344a738a-646c-42f8-8018-7c706048aa2b",
  "resource": {
    "meta": {
      "versionId": "1.0",
      "lastUpdated": "2023-05-18T00:00:00.000Z",
      "profile": [
        "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Goal/1.1.0"
      ]
    },
    "resourceType": "Goal",
    "identifier": [
      {
        "type": {
          "coding": [
            {
              "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
              "version": "2.9",
              "code": "RI",
              "display": "Resource identifier"
            }
          ]
        },
        "system": "urn:ietf:rhc:3986",
        "value": "urn:uuid:344a738a-646c-42f8-8018-7c706048aa2b"
      }
    ],
    "lifecycleStatus": "active",
    "achievementStatus": {
      "coding": [
        {
          "system": "http://terminology.hl7.org/CodeSystem/goal-achievement",
          "version": "4.0.1",
          "code": "in-progress",
          "display": "In Progress"
        }
      ]
    },
    "priority": {
      "coding": [
        {
          "system": "http://terminology.hl7.org/CodeSystem/goal-priority",
          "version": "0.1.0",
          "code": "medium-priority",
          "display": "Medium Priority"
        }
      ]
    }
  }
}

```

```
},
  "description": {
    "coding": [
      {
        "system": "http://loinc.org",
        "version": "2.69",
        "code": "87528-6",
        "display": "Personal health goal"
      }
    ],
    "text": "To be able to do housework"
  },
  "subject": {
    "reference": "Patient/e7c50926-d548-4a81-8f79-1f39c2c9d399"
  }
}
]
```

Example XML

```
<Bundle xmlns="http://hl7.org/fhir">
  <id value="6a45dada-e418-4e76-b851-935e5f51faf4"/>
  <meta>
    <versionId value="1.0"/>
    <lastUpdated value="2023-05-18T00:00:00.000Z"/>
    <profile value="https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Bundle|1.1.0"/>
  </meta>
  <identifier>
    <type>
      <coding>
        <system value="http://terminology.hl7.org/CodeSystem/v2-0203"/>
        <version value="2.9"/>
        <code value="RI"/>
        <display value="Resource identifier"/>
      </coding>
    </type>
    <system value="urn:ietf:rfc:3986"/>
    <value value="urn:uuid:6a45dada-e418-4e76-b851-935e5f51faf4"/>
  </identifier>
  <type value="document"/>
  <timestamp value="2023-05-31T11:01:34.848Z"/>
  <entry>
    <fullUrl value="urn:uuid:a29c6dcf-318b-4511-a462-5d59db6dc0fa"/>
    <resource>
      <Composition>
        <meta>
          <versionId value="1.0"/>
          <lastUpdated value="2023-05-18T00:00:00.000Z"/>
          <profile value="https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Composition|1.1.0"/>
        </meta>
        <extension url="https://fhir.kbv.de/StructureDefinition/KBV_EX_MIO_DIGA_Betrachtungszeitraum">
          <valuePeriod>
            <start value="2023-05-31T11:01:34.848Z"/>
            <end value="2023-05-31T11:01:34.848Z"/>
          </valuePeriod>
        </extension>
        <status value="final"/>
        <type>
          <coding>
            <system value="http://loinc.org"/>
            <version value="2.72"/>
            <code value="53576-5"/>
            <display value="Personal health monitoring report Document"/>
          </coding>
        </type>
        <subject>
          <reference value="urn:uuid:c5d28810-60e8-493d-8732-83be79b742f0"/>
        </subject>
        <date value="2023-05-31T11:01:34.848Z"/>
        <author>
          <reference value="urn:uuid:64059ae1-c00a-4c79-8e1d-84c0858989e9"/>
        </author>
        <title value="DiGA-Export"/>
        <section>
          <title value="Aktivitäten"/>
        </section>
      </Composition>
    </resource>
  </entry>
</Bundle>
```

```

<code>
  <coding>
    <system value="https://fhir.kbv.de/CodeSystem/KBV_CS_MIO_DIGA_Section_Codes"/>
    <version value="1.1.0"/>
    <code value="SectionAktivitaeten"/>
    <display value="Bereich Aktivitäten"/>
  </coding>
</code>
<entry>
  <reference value="urn:uuid:99b38416-c762-4754-86c0-6204bd37324e"/>
</entry>
<entry>
  <reference value="urn:uuid:f33ebba2-57b8-4ecf-b0d0-faf4d6234145"/>
</entry>
<entry>
  <reference value="urn:uuid:8198c13d-691d-4bda-87c4-389c7a634bbc"/>
</entry>
<entry>
  <reference value="urn:uuid:411bb9d2-346a-4e31-8702-1bced87586f9"/>
</entry>
<entry>
  <reference value="urn:uuid:8dfc6ccd-d788-4be3-bd9c-697d2b851dbe"/>
</entry>
<entry>
  <reference value="urn:uuid:ce30d731-8047-4781-b5ec-d1be298a8574"/>
</entry>
</section>
<section>
  <title value="Ziele"/>
  <code>
    <coding>
      <system value="https://fhir.kbv.de/CodeSystem/KBV_CS_MIO_DIGA_Section_Codes"/>
      <version value="1.1.0"/>
      <code value="SectionZiele"/>
      <display value="Bereich Ziele"/>
    </coding>
  </code>
  <entry>
    <reference value="urn:uuid:e0488d69-a3a4-4fca-a164-09795f57fa07"/>
  </entry>
  <entry>
    <reference value="urn:uuid:b8a44d03-287e-43a8-93d4-4a241d5aa290"/>
  </entry>
  <entry>
    <reference value="urn:uuid:e2f2b97e-8f50-4656-be02-617df950943d"/>
  </entry>
  <entry>
    <reference value="urn:uuid:344a738a-646c-42f8-8018-7c706048aa2b"/>
  </entry>
</section>
<section>
  <title value="Anhaenge"/>
  <code>
    <coding>
      <system value="https://fhir.kbv.de/CodeSystem/KBV_CS_MIO_DIGA_Section_Codes"/>
      <version value="1.1.0"/>

```

```

    <code value="SectionAnhhaenge"/>
    <display value="Bereich Anhänge"/>
  </coding>
</code>
<entry>
  <reference value="urn:uuid:19293be6-29ab-46a5-8896-3705ba5bc325"/>
</entry>
<entry>
  <reference value="urn:uuid:e52bc281-5645-4b96-a795-3b79248945d3"/>
</entry>
</section>
</Composition>
</resource>
</entry>
<entry>
  <fullUrl value="urn:uuid:19293be6-29ab-46a5-8896-3705ba5bc325"/>
  <resource>
    <Device>
      <meta>
        <versionId value="1.0"/>
        <lastUpdated value="2023-05-18T00:00:00.000Z"/>
        <profile value="https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Device_DIGA|1.1.0"/>
      </meta>
      <identifier>
        <use value="official"/>
        <type>
          <coding>
            <system value="http://terminology.hl7.org/CodeSystem/v2-0203"/>
            <version value="2.9"/>
            <code value="RI"/>
            <display value="Resource identifier"/>
          </coding>
        </type>
        <system value="urn:ietf:rhc:3986"/>
        <value value="urn:uuid:19293be6-29ab-46a5-8896-3705ba5bc325"/>
      </identifier>
      <definition>
        <reference>
          <reference value="urn:uuid:e52bc281-5645-4b96-a795-3b79248945d3"/>
        </reference>
      </definition>
      <type>
        <coding>
          <system value="http://fhir.de/CodeSystem/ifa/pzn"/>
          <code value="999999999"/>
        </coding>
      </type>
    </Device>
  </resource>
</entry>
<entry>
  <fullUrl value="urn:uuid:e52bc281-5645-4b96-a795-3b79248945d3"/>
  <resource>
    <DeviceDefinition>
      <meta>
        <versionId value="1.0"/>

```

```

<lastUpdated value="2023-05-18T00:00:00.000Z"/>
<profile value="https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_DeviceDefinition_DIGA|1.1.0"/>
</meta>
<identifier>
  <type>
    <coding>
      <system value="http://terminology.hl7.org/CodeSystem/v2-0203"/>
      <version value="2.9"/>
      <code value="RI"/>
      <display value="Resource identifier"/>
    </coding>
  </type>
  <system value="urn:ietf:rhc:3986"/>
  <value value="urn:uuid:e52bc281-5645-4b96-a795-3b79248945d3"/>
</identifier>
</DeviceDefinition>
</resource>
</entry>
<entry>
  <fullUrl value="urn:uuid:c5d28810-60e8-493d-8732-83be79b742f0"/>
  <resource>
    <Patient>
      <meta>
        <versionId value="1.0"/>
        <lastUpdated value="2023-05-18T00:00:00.000Z"/>
        <profile value="https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Patient|1.1.0"/>
      </meta>
      <identifier>
        <use value="official"/>
        <type>
          <coding>
            <system value="http://terminology.hl7.org/CodeSystem/v2-0203"/>
            <version value="2.9"/>
            <code value="RI"/>
            <display value="Resource identifier"/>
          </coding>
        </type>
        <system value="urn:ietf:rhc:3986"/>
        <value value="urn:uuid:c5d28810-60e8-493d-8732-83be79b742f0"/>
      </identifier>
      <name>
        <use value="official"/>
        <text value="test80"/>
        <family value="test80"/>
      </name>
      <gender value="unknown"/>
    </Patient>
  </resource>
</entry>
<entry>
  <fullUrl value="urn:uuid:64059ae1-c00a-4c79-8e1d-84c0858989e9"/>
  <resource>
    <Organization>
      <meta>
        <versionId value="1.0"/>
        <lastUpdated value="2023-05-18T00:00:00.000Z"/>

```

```

    <profile value="https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Organization|1.1.0"/>
  </meta>
  <identifier>
    <type>
      <coding>
        <system value="http://terminology.hl7.org/CodeSystem/v2-0203"/>
        <version value="2.9"/>
        <code value="RI"/>
        <display value="Resource identifier"/>
      </coding>
    </type>
    <system value="urn:ietf:rhc:3986"/>
    <value value="urn:uuid:64059ae1-c00a-4c79-8e1d-84c0858989e9"/>
  </identifier>
</Organization>
</resource>
</entry>
<entry>
  <fullUrl value="urn:uuid:99b38416-c762-4754-86c0-6204bd37324e"/>
  <resource>
    <Observation>
      <meta>
        <versionId value="1.0"/>
        <lastUpdated value="2023-05-18T00:00:00.000Z"/>
        <profile value="https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Observation_Free|1.1.0"/>
      </meta>
      <identifier>
        <use value="official"/>
        <type>
          <coding>
            <system value="http://terminology.hl7.org/CodeSystem/v2-0203"/>
            <version value="2.9"/>
            <code value="RI"/>
            <display value="Resource identifier"/>
          </coding>
        </type>
        <system value="urn:ietf:rhc:3986"/>
        <value value="urn:uuid:99b38416-c762-4754-86c0-6204bd37324e"/>
      </identifier>
      <status value="final"/>
      <category>
        <coding>
          <system value="http://terminology.hl7.org/CodeSystem/observation-category"/>
          <version value="0.1.0"/>
          <code value="activity"/>
          <display value="Activity"/>
        </coding>
      </category>
      <code>
        <coding>
          <system value="http://snomed.info/sct"/>
          <version value="http://snomed.info/sct/9000000000000207008/version/20230131"/>
          <code value="112080002"/>
          <display value="Cheerful mood (finding)"/>
        </coding>
      </code>
    </Observation>
  </resource>
</entry>

```

```

<system value="http://snomed.info/sct"/>
<version value="http://snomed.info/sct/900000000000207008/version/20230131"/>
<code value="405152002"/>
<display value="Quality of life satisfaction"/>
</coding>
</code>
<subject>
<reference value="Patient/ee604a45-45ca-455e-a0f2-2c7fc83d808f"/>
</subject>
<issued value="2023-05-04T12:14:56.000Z"/>
<valueInteger value="62"/>
<referenceRange>
<low>
<value value="0"/>
</low>
<high>
<value value="100"/>
</high>
</referenceRange>
</Observation>
</resource>
</entry>
<entry>
<fullUrl value="urn:uuid:f33ebba2-57b8-4ecf-b0d0-faf4d6234145"/>
<resource>
<Observation>
<meta>
<versionId value="1.0"/>
<lastUpdated value="2023-05-18T00:00:00.000Z"/>
<profile value="https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Observation_Free|1.1.0"/>
</meta>
<identifier>
<use value="official"/>
<type>
<coding>
<system value="http://terminology.hl7.org/CodeSystem/v2-0203"/>
<version value="2.9"/>
<code value="RI"/>
<display value="Resource identifier"/>
</coding>
</type>
<system value="urn:ietf:rhc:3986"/>
<value value="urn:uuid:f33ebba2-57b8-4ecf-b0d0-faf4d6234145"/>
</identifier>
<status value="final"/>
<category>
<coding>
<system value="http://terminology.hl7.org/CodeSystem/observation-category"/>
<version value="0.1.0"/>
<code value="activity"/>
<display value="Activity"/>
</coding>
</category>
<code>
<coding>
<system value="http://snomed.info/sct"/>

```

```

<version value="http://snomed.info/sct/900000000000207008/version/20230131"/>
<code value="440398005"/>
<display value="Level of fatigue (observable entity)"/>
</coding>
<coding>
<system value="http://snomed.info/sct"/>
<version value="http://snomed.info/sct/900000000000207008/version/20230131"/>
<code value="359755007"/>
<display value="Energy / stamina (observable entity)"/>
</coding>
</code>
<subject>
<reference value="Patient/ee604a45-45ca-455e-a0f2-2c7fc83d808f"/>
</subject>
<issued value="2023-05-04T12:14:55.000Z"/>
<valueInteger value="37"/>
<referenceRange>
<low>
<value value="0"/>
</low>
<high>
<value value="100"/>
</high>
</referenceRange>
</Observation>
</resource>
</entry>
<entry>
<fullUrl value="urn:uuid:8198c13d-691d-4bda-87c4-389c7a634bbc"/>
<resource>
<Observation>
<meta>
<versionId value="1.0"/>
<lastUpdated value="2023-05-18T00:00:00.000Z"/>
<profile value="https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Observation_Free|1.1.0"/>
</meta>
<identifier>
<use value="official"/>
<type>
<coding>
<system value="http://terminology.hl7.org/CodeSystem/v2-0203"/>
<version value="2.9"/>
<code value="RI"/>
<display value="Resource identifier"/>
</coding>
</type>
<system value="urn:ietf:rhc:3986"/>
<value value="urn:uuid:8198c13d-691d-4bda-87c4-389c7a634bbc"/>
</identifier>
<status value="final"/>
<category>
<coding>
<system value="http://terminology.hl7.org/CodeSystem/observation-category"/>
<version value="0.1.0"/>
<code value="activity"/>
<display value="Activity"/>

```

```

</coding>
</category>
<code>
  <coding>
    <system value="http://snomed.info/sct"/>
    <version value="http://snomed.info/sct/900000000000207008/version/20230131"/>
    <code value="112080002"/>
    <display value="Cheerful mood (finding)"/>
  </coding>
  <coding>
    <system value="http://snomed.info/sct"/>
    <version value="http://snomed.info/sct/900000000000207008/version/20230131"/>
    <code value="405152002"/>
    <display value="Quality of life satisfaction"/>
  </coding>
</code>
<subject>
  <reference value="Patient/ee604a45-45ca-455e-a0f2-2c7fc83d808f"/>
</subject>
<issued value="2023-05-04T12:14:07.000Z"/>
<valueInteger value="66"/>
<referenceRange>
  <low>
    <value value="0"/>
  </low>
  <high>
    <value value="100"/>
  </high>
</referenceRange>
</Observation>
</resource>
</entry>
<entry>
  <fullUrl value="urn:uuid:411bb9d2-346a-4e31-8702-1bcd87586f9"/>
  <resource>
    <Observation>
      <meta>
        <versionId value="1.0"/>
        <lastUpdated value="2023-05-18T00:00:00.000Z"/>
        <profile value="https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Observation_Free|1.1.0"/>
      </meta>
      <identifier>
        <use value="official"/>
        <type>
          <coding>
            <system value="http://terminology.hl7.org/CodeSystem/v2-0203"/>
            <version value="2.9"/>
            <code value="RI"/>
            <display value="Resource identifier"/>
          </coding>
        </type>
        <system value="urn:ietf:rhc:3986"/>
        <value value="urn:uuid:411bb9d2-346a-4e31-8702-1bcd87586f9"/>
      </identifier>
      <status value="final"/>
    </category>
  </resource>
</entry>

```

```

<coding>
  <system value="http://terminology.hl7.org/CodeSystem/observation-category"/>
  <version value="0.1.0"/>
  <code value="activity"/>
  <display value="Activity"/>
</coding>
</category>
<code>
  <coding>
    <system value="http://snomed.info/sct"/>
    <version value="http://snomed.info/sct/900000000000207008/version/20230131"/>
    <code value="440398005"/>
    <display value="Level of fatigue (observable entity)"/>
  </coding>
  <coding>
    <system value="http://snomed.info/sct"/>
    <version value="http://snomed.info/sct/900000000000207008/version/20230131"/>
    <code value="359755007"/>
    <display value="Energy / stamina (observable entity)"/>
  </coding>
</code>
<subject>
  <reference value="Patient/ee604a45-45ca-455e-a0f2-2c7fc83d808f"/>
</subject>
<issued value="2023-05-04T12:14:06.000Z"/>
<valueInteger value="0"/>
<referenceRange>
  <low>
    <value value="0"/>
  </low>
  <high>
    <value value="100"/>
  </high>
</referenceRange>
</Observation>
</resource>
</entry>
<entry>
  <fullUrl value="urn:uuid:8dfc6ccd-d788-4be3-bd9c-697d2b851dbe"/>
  <resource>
    <Observation>
      <meta>
        <versionId value="1.0"/>
        <lastUpdated value="2023-05-18T00:00:00.000Z"/>
        <profile value="https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Observation_Free|1.1.0"/>
      </meta>
      <identifier>
        <use value="official"/>
        <type>
          <coding>
            <system value="http://terminology.hl7.org/CodeSystem/v2-0203"/>
            <version value="2.9"/>
            <code value="RI"/>
            <display value="Resource identifier"/>
          </coding>
        </type>
      </identifier>
    </Observation>
  </resource>
</entry>

```

```

<system value="urn:ietf:rhc:3986"/>
<value value="urn:uuid:8dfc6ccd-d788-4be3-bd9c-697d2b851dbe"/>
</identifier>
<status value="final"/>
<category>
  <coding>
    <system value="http://terminology.hl7.org/CodeSystem/observation-category"/>
    <version value="0.1.0"/>
    <code value="activity"/>
    <display value="Activity"/>
  </coding>
</category>
<code>
  <coding>
    <system value="http://snomed.info/sct"/>
    <version value="http://snomed.info/sct/900000000000207008/version/20230131"/>
    <code value="359755007"/>
    <display value="Energy / stamina (observable entity)"/>
  </coding>
  <coding>
    <system value="http://snomed.info/sct"/>
    <version value="http://snomed.info/sct/900000000000207008/version/20230131"/>
    <code value="406202006"/>
    <display value="Energy observable (observable entity)"/>
  </coding>
</code>
<subject>
  <reference value="Patient/ee604a45-45ca-455e-a0f2-2c7fc83d808f"/>
</subject>
<issued value="2023-05-04T12:15:04.000Z"/>
<valueInteger value="63"/>
<referenceRange>
  <low>
    <value value="0"/>
  </low>
  <high>
    <value value="100"/>
  </high>
</referenceRange>
<component>
  <code>
    <coding>
      <system value="http://loinc.org"/>
      <version value="2.71"/>
      <code value="51855-5"/>
      <display value="Patient note"/>
    </coding>
    <text value="in"/>
  </code>
  <valueString value="Family"/>
</component>
<component>
  <code>
    <coding>
      <system value="http://loinc.org"/>
      <version value="2.71"/>

```

```

<code value="51855-5"/>
<display value="Patient note"/>
</coding>
<text value="in"/>
</code>
<valueString value="Social contact"/>
</component>
<component>
<code>
<coding>
<system value="http://loinc.org"/>
<version value="2.71"/>
<code value="51855-5"/>
<display value="Patient note"/>
</coding>
<text value="in"/>
</code>
<valueString value="Cycling"/>
</component>
<component>
<code>
<coding>
<system value="http://loinc.org"/>
<version value="2.71"/>
<code value="51855-5"/>
<display value="Patient note"/>
</coding>
<text value="out"/>
</code>
<valueString value="Family"/>
</component>
<component>
<code>
<coding>
<system value="http://loinc.org"/>
<version value="2.71"/>
<code value="51855-5"/>
<display value="Patient note"/>
</coding>
<text value="out"/>
</code>
<valueString value="Negative people"/>
</component>
<component>
<code>
<coding>
<system value="http://loinc.org"/>
<version value="2.71"/>
<code value="51855-5"/>
<display value="Patient note"/>
</coding>
<text value="leak"/>
</code>
<valueString value="Gloominess"/>
</component>
</component>

```

```

<code>
  <coding>
    <system value="http://loinc.org"/>
    <version value="2.71"/>
    <code value="51855-5"/>
    <display value="Patient note"/>
  </coding>
  <text value="leak"/>
</code>
<valueString value="Fear"/>
</component>
<component>
  <code>
    <coding>
      <system value="http://loinc.org"/>
      <version value="2.71"/>
      <code value="51855-5"/>
      <display value="Patient note"/>
    </coding>
    <text value="leak"/>
  </code>
  <valueString value="Sleeping problems"/>
</component>
<component>
  <code>
    <coding>
      <system value="http://loinc.org"/>
      <version value="2.71"/>
      <code value="51855-5"/>
      <display value="Patient note"/>
    </coding>
    <text value="leak"/>
  </code>
  <valueString value="Financial concerns"/>
</component>
<component>
  <code>
    <coding>
      <system value="http://loinc.org"/>
      <version value="2.71"/>
      <code value="51855-5"/>
      <display value="Patient note"/>
    </coding>
    <text value="leak"/>
  </code>
  <valueString value="Shortness of breath"/>
</component>
</Observation>
</resource>
</entry>
<entry>
  <fullUrl value="urn:uuid:ce30d731-8047-4781-b5ec-d1be298a8574"/>
  <resource>
    <Observation>
      <meta>
        <versionId value="1.0"/>

```

```

<lastUpdated value="2023-05-18T00:00:00.000Z"/>
<profile value="https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Observation_Free|1.1.0"/>
</meta>
<identifier>
  <use value="official"/>
  <type>
    <coding>
      <system value="http://terminology.hl7.org/CodeSystem/v2-0203"/>
      <version value="2.9"/>
      <code value="RI"/>
      <display value="Resource identifier"/>
    </coding>
  </type>
  <system value="urn:ietf:rhc:3986"/>
  <value value="urn:uuid:ce30d731-8047-4781-b5ec-d1be298a8574"/>
</identifier>
<status value="final"/>
<category>
  <coding>
    <system value="http://terminology.hl7.org/CodeSystem/observation-category"/>
    <version value="0.1.0"/>
    <code value="activity"/>
    <display value="Activity"/>
  </coding>
</category>
<code>
  <coding>
    <system value="http://snomed.info/sct"/>
    <version value="http://snomed.info/sct/900000000000207008/version/20230131"/>
    <code value="359755007"/>
    <display value="Energy / stamina (observable entity)"/>
  </coding>
  <coding>
    <system value="http://snomed.info/sct"/>
    <version value="http://snomed.info/sct/900000000000207008/version/20230131"/>
    <code value="406202006"/>
    <display value="Energy observable (observable entity)"/>
  </coding>
</code>
<subject>
  <reference value="Patient/ee604a45-45ca-455e-a0f2-2c7fc83d808f"/>
</subject>
<issued value="2023-05-04T12:14:21.000Z"/>
<valueInteger value="54"/>
<referenceRange>
  <low>
    <value value="0"/>
  </low>
  <high>
    <value value="100"/>
  </high>
</referenceRange>
<component>
  <code>
    <coding>
      <system value="http://loinc.org"/>

```

```

<version value="2.71"/>
<code value="51855-5"/>
<display value="Patient note"/>
</coding>
<text value="in"/>
</code>
<valueString value="Family"/>
</component>
<component>
<code>
<coding>
<system value="http://loinc.org"/>
<version value="2.71"/>
<code value="51855-5"/>
<display value="Patient note"/>
</coding>
<text value="in"/>
</code>
<valueString value="Social contact"/>
</component>
<component>
<code>
<coding>
<system value="http://loinc.org"/>
<version value="2.71"/>
<code value="51855-5"/>
<display value="Patient note"/>
</coding>
<text value="in"/>
</code>
<valueString value="Cycling"/>
</component>
<component>
<code>
<coding>
<system value="http://loinc.org"/>
<version value="2.71"/>
<code value="51855-5"/>
<display value="Patient note"/>
</coding>
<text value="out"/>
</code>
<valueString value="Family"/>
</component>
<component>
<code>
<coding>
<system value="http://loinc.org"/>
<version value="2.71"/>
<code value="51855-5"/>
<display value="Patient note"/>
</coding>
<text value="out"/>
</code>
<valueString value="Negative people"/>
</component>

```

```

<component>
  <code>
    <coding>
      <system value="http://loinc.org"/>
      <version value="2.71"/>
      <code value="51855-5"/>
      <display value="Patient note"/>
    </coding>
    <text value="leak"/>
  </code>
  <valueString value="Financial concerns"/>
</component>
<component>
  <code>
    <coding>
      <system value="http://loinc.org"/>
      <version value="2.71"/>
      <code value="51855-5"/>
      <display value="Patient note"/>
    </coding>
    <text value="leak"/>
  </code>
  <valueString value="Shortness of breath"/>
</component>
</Observation>
</resource>
</entry>
<entry>
  <fullUrl value="urn:uuid:e0488d69-a3a4-4fca-a164-09795f57fa07"/>
  <resource>
    <Goal>
      <meta>
        <versionId value="1.0"/>
        <lastUpdated value="2023-05-18T00:00:00.000Z"/>
        <profile value="https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Goal|1.1.0"/>
      </meta>
      <identifier>
        <type>
          <coding>
            <system value="http://terminology.hl7.org/CodeSystem/v2-0203"/>
            <version value="2.9"/>
            <code value="RI"/>
            <display value="Resource identifier"/>
          </coding>
        </type>
        <system value="urn:ietf:rhc:3986"/>
        <value value="urn:uuid:e0488d69-a3a4-4fca-a164-09795f57fa07"/>
      </identifier>
      <lifecycleStatus value="completed"/>
      <achievementStatus>
        <coding>
          <system value="http://terminology.hl7.org/CodeSystem/goal-achievement"/>
          <version value="4.0.1"/>
          <code value="achieved"/>
          <display value="Achieved"/>
        </coding>

```

```

</achievementStatus>
<priority>
  <coding>
    <system value="http://terminology.hl7.org/CodeSystem/goal-priority"/>
    <version value="0.1.0"/>
    <code value="high-priority"/>
    <display value="High Priority"/>
  </coding>
</priority>
<description>
  <coding>
    <system value="http://loinc.org"/>
    <version value="2.69"/>
    <code value="87528-6"/>
    <display value="Personal health goal"/>
  </coding>
  <text value="Do voluntary work"/>
</description>
<subject>
  <reference value="Patient/ee604a45-45ca-455e-a0f2-2c7fc83d808f"/>
</subject>
</Goal>
</resource>
</entry>
<entry>
  <fullUrl value="urn:uuid:b8a44d03-287e-43a8-93d4-4a241d5aa290"/>
  <resource>
    <Goal>
      <meta>
        <versionId value="1.0"/>
        <lastUpdated value="2023-05-18T00:00:00.000Z"/>
        <profile value="https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Goal|1.1.0"/>
      </meta>
      <identifier>
        <type>
          <coding>
            <system value="http://terminology.hl7.org/CodeSystem/v2-0203"/>
            <version value="2.9"/>
            <code value="RI"/>
            <display value="Resource identifier"/>
          </coding>
        </type>
        <system value="urn:ietf:rhc:3986"/>
        <value value="urn:uuid:b8a44d03-287e-43a8-93d4-4a241d5aa290"/>
      </identifier>
      <lifecycleStatus value="active"/>
      <achievementStatus>
        <coding>
          <system value="http://terminology.hl7.org/CodeSystem/goal-achievement"/>
          <version value="4.0.1"/>
          <code value="in-progress"/>
          <display value="In Progress"/>
        </coding>
      </achievementStatus>
      <priority>
        <coding>

```

```

<system value="http://terminology.hl7.org/CodeSystem/goal-priority"/>
<version value="0.1.0"/>
<code value="high-priority"/>
<display value="High Priority"/>
</coding>
</priority>
<description>
<coding>
<system value="http://loinc.org"/>
<version value="2.69"/>
<code value="87528-6"/>
<display value="Personal health goal"/>
</coding>
<text value="Improved quality of life"/>
</description>
<subject>
<reference value="Patient/ee604a45-45ca-455e-a0f2-2c7fc83d808f"/>
</subject>
</Goal>
</resource>
</entry>
<entry>
<fullUrl value="urn:uuid:e2f2b97e-8f50-4656-be02-617df950943d"/>
<resource>
<Goal>
<meta>
<versionId value="1.0"/>
<lastUpdated value="2023-05-18T00:00:00.000Z"/>
<profile value="https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Goal|1.1.0"/>
</meta>
<identifier>
<type>
<coding>
<system value="http://terminology.hl7.org/CodeSystem/v2-0203"/>
<version value="2.9"/>
<code value="RI"/>
<display value="Resource identifier"/>
</coding>
</type>
<system value="urn:ietf:rhc:3986"/>
<value value="urn:uuid:e2f2b97e-8f50-4656-be02-617df950943d"/>
</identifier>
<lifecycleStatus value="active"/>
<achievementStatus>
<coding>
<system value="http://terminology.hl7.org/CodeSystem/goal-achievement"/>
<version value="4.0.1"/>
<code value="in-progress"/>
<display value="In Progress"/>
</coding>
</achievementStatus>
<priority>
<coding>
<system value="http://terminology.hl7.org/CodeSystem/goal-priority"/>
<version value="0.1.0"/>
<code value="medium-priority"/>

```

```

    <display value="Medium Priority"/>
  </coding>
</priority>
<description>
  <coding>
    <system value="http://loinc.org"/>
    <version value="2.69"/>
    <code value="87528-6"/>
    <display value="Personal health goal"/>
  </coding>
  <text value="To feel happier"/>
</description>
<subject>
  <reference value="Patient/ee604a45-45ca-455e-a0f2-2c7fc83d808f"/>
</subject>
</Goal>
</resource>
</entry>
<entry>
  <fullUrl value="urn:uuid:344a738a-646c-42f8-8018-7c706048aa2b"/>
  <resource>
    <Goal>
      <meta>
        <versionId value="1.0"/>
        <lastUpdated value="2023-05-18T00:00:00.000Z"/>
        <profile value="https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Goal|1.1.0"/>
      </meta>
      <identifier>
        <type>
          <coding>
            <system value="http://terminology.hl7.org/CodeSystem/v2-0203"/>
            <version value="2.9"/>
            <code value="RI"/>
            <display value="Resource identifier"/>
          </coding>
        </type>
        <system value="urn:ietf:rhc:3986"/>
        <value value="urn:uuid:344a738a-646c-42f8-8018-7c706048aa2b"/>
      </identifier>
      <lifecycleStatus value="active"/>
      <achievementStatus>
        <coding>
          <system value="http://terminology.hl7.org/CodeSystem/goal-achievement"/>
          <version value="4.0.1"/>
          <code value="in-progress"/>
          <display value="In Progress"/>
        </coding>
      </achievementStatus>
      <priority>
        <coding>
          <system value="http://terminology.hl7.org/CodeSystem/goal-priority"/>
          <version value="0.1.0"/>
          <code value="medium-priority"/>
          <display value="Medium Priority"/>
        </coding>
      </priority>
    </Goal>
  </resource>
</entry>

```

```
<description>
  <coding>
    <system value="http://loinc.org"/>
    <version value="2.69"/>
    <code value="87528-6"/>
    <display value="Personal health goal"/>
  </coding>
  <text value="To be able to do housework"/>
</description>
<subject>
  <reference value="Patient/ee604a45-45ca-455e-a0f2-2c7fc83d808f"/>
</subject>
</Goal>
</resource>
</entry>
</Bundle>
```

4. Document control

| | | |
|----------------------|---|---|
| Author(s): | Geert Stuut Atse Aukes | Developer Lead Backend Tired of Cancer BV CGO Tired of Cancer BV |
| Reviewed by: | Atse Aukes | CGO Tired of Cancer BV |
| Approved by: | Bram Kuiper | CEO Tired of Cancer BV |
| Version: | June 2, 2023 – Version 1.3 | |
| Data classification: | Public | |

©2023 Tired of Cancer B.V.

Tired of Cancer BV

Koningin Wilhelminalaan 5
3527LA Utrecht
The Netherlands

+31 (0) 85 018 76 08
info@tiredofcancerapp.com
www.tiredofcancerapp.com

CC NL: 59422610
IBAN NL 44 TRIO 0197 7937
89
VAT 853475349 B 01