
ProHerz FHIR Implementierungsleitfaden 2.1

Leitfaden zur Nutzung des FHIR Datenexports der
ProHerz App

ProCurement GmbH



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1 Einleitung

Dieses Dokument beschreibt wie der im Daten-Export enthaltene FHIR-Datensatz aufgebaut ist, welche Daten darin enthalten sind und wie diese kodiert sind.

Der Implementierungsleitfaden soll Anwendern helfen, die in der ProHerz App erfassten Daten in FHIR kompatible Systeme zu übernehmen und dort weiterzuverarbeiten.

2 FHIR Ressourcen

Die FHIR Ressourcen folgen den vom KBV herausgegebenen Profilen des [MIO DIGA TOOLKIT 1.1.0 \(Festlegung\)](#). Genauere Informationen dazu finden sich auf der Webseite.

2.1 Bundle

Die vom Patienten erfassten Daten werden gebündelt als [Bundle-Resource](#) entsprechend dem vom KBV bereitgestellten Profil [KBV_PR_MIO_DIGA_Bundle](#) exportiert.

Das Bundle des ProHerz FHIR Exports beinhaltet folgende Einträge.

- Patientendokument
- Patientenstammdaten
- Vitalparameter
 - Blutdruck
 - Gewicht
 - Trockengewicht
 - Herzfrequenz
 - Sauerstoffsättigung
 - Temperatur
- Medikamente
- Medikationsplan
- Medikamenteneinnahmen
- Allergien
- Diagnosen
- Fragebogen-Antworten
- Fragebögen
- DIGA-App

- DIGA-Hersteller

Die genaue Spezifikation der genannten Einträge findet sich in den nachfolgenden Kapiteln.

2.2 Patientendokument

Das Patientendokument wird als [Composition-Resource](#) nach dem vom KBV bereitgestellten Profil [KBV_PR_MIO_DIGA_Composition](#) exportiert. Folgende Sektionen sind enthalten:

- Medikation
 - Medikamente
 - Medikationsplan
 - Medikamenteneinnahmen
- Probleme (Diagnosen, Allergien und Unverträglichkeiten)
 - Allergien
 - Diagnosen
- Befunde und Ergebnisse (Vitalparameter)
- Fragebogen-Antworten (Fragebögen)

Die Einträge sind als Referenzen auf die im Bundle enthaltenen Ressourcen hinterlegt.

Das Patientendokument enthält zusätzlich eine Referenz auf die für den Export verantwortliche DIGA-App.

2.3 Patientenstammdaten

Die Patientenstammdaten werden als [Patient-Resource](#) entsprechend dem KBV Profil [KBV_PR_MIO_DIGA_Patient](#) exportiert.

Folgende Daten sind enthalten:

- Name
- Geschlecht
- Telefonnummer
- E-Mail-Adresse
- Adresse

Beispiel:

```
1  {
2  "resourceType": "Patient",
3  "id": "2d931510-d99f-494a-8c67-87feb05e1594",
4  "meta": {
5  "versionId": "2",
6  "lastUpdated": "2023-07-10T13:52:39+02:00",
7  "profile": [
8  "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Patient|1.1.0"
9  ]
10 },
11 "identifier": [
12 {
13 "type": {
14 "coding": [
15 {
16 "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
17 "version": "2.9",
18 "code": "RI",
19 "display": "Resource identifier"
20 }
21 ]
22 },
23 "system": "urn:ietf:rfc:3986",
24 "value": "urn:procurement:patient:2d931510-d99f-494a-8c67-87feb05e1594|2"
25 }
26 ],
27 "name": [
28 {
29 "use": "official",
30 "text": "DR. Max Mustermann",
31 "family": "Mustermann",
32 "_family": {
33 "extension": [
34 {
35 "url": "http://hl7.org/fhir/StructureDefinition/humanname-own-name",
36 "valueString": "Mustermann"
37 }
38 ]
39 },
40 "given": [
41 "Max"
42 ]
43 }
44 ],
45 "telecom": [
46 {
47 "system": "phone",
48 "_system": {
49 "extension": [
50 {
51 "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
52 "extension": [
53 {
54 "url": "content",
55 "valueString": "Telefonnummer"
56 }
57 ]
58 }
59 ]
60 },
61 "value": "0123456789"
62 },
63 {
64 "system": "phone",
65 "_system": {
66 "extension": [
67 {
68 "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
69 "extension": [
70 {
71 "url": "content",
72 "valueString": "Telefonnummer"
73 }
74 ]
75 }
76 ]
77 },
78 "value": "987654321"
79 },
80 {
81 "value": "demo_patient@email.com",
82 "system": "email",
83 "_system": {
84 "extension": [
85 {
86 "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
```

```
87     "extension": [  
88       {  
89         "url": "content",  
90         "valueString": "E-Mail"  
91       }  
92     ]  
93   }  
94 ]  
95 }  
96 }  
97 ],  
98 "gender": "male",  
99 "birthDate": "1997-02-08",  
100 "address": [  
101   {  
102     "type": "both",  
103     "line": [  
104       "Nürnberger Straße 45"  
105     ],  
106     "city": "München",  
107     "postalCode": "12345"  
108   }  
109 ]  
110 }
```

2.4 Vitalparameter

Die Vitalparameter werden als [Observation-Resource](#) exportiert. Dabei sind die entsprechenden Vitalparameter-Typen wie folgt spezifiziert.

2.4.1 Blutdruck

Profil:	KBV_PR_MIO_DIGA_Observation_Blood_Pressure
Einheit:	mmHg
SNOMED-Coding:	75367002
LOINC-Coding:	85354-9

Beispiel:

```
1  {  
2    "resourceType": "Observation",  
3    "status": "final",  
4    "meta": {  
5      "versionId": "1",  
6      "lastUpdated": "2023-07-10T13:53:44+02:00",  
7      "profile": [  
8        "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Observation_Blood_Pressure|1.1.0"  
9      ]  
10   },  
11   "subject": {  
12     "reference": "urn:procarement:patient:2d931510-d99f-494a-8c67-87feb05e1594"  
13   },  
14   "performer": [  
15     {  
16       "reference": "urn:procarement:patient:2d931510-d99f-494a-8c67-87feb05e1594"  
17     }  
18   ],  
19   "identifier": [  
20     {  
21       "type": {  
22         "coding": [  

```

```
23     {
24       "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
25       "version": "2.9",
26       "code": "RI",
27       "display": "Resource identifier"
28     }
29   ],
30   },
31   "system": "urn:ietf:rfc:3986",
32   "value": "urn:procurement:blood_pressure_result:167|1"
33 },
34 ],
35 "category": [
36   {
37     "coding": [
38       {
39         "system": "http://terminology.hl7.org/CodeSystem/observation-category",
40         "version": "4.0.1",
41         "code": "vital-signs",
42         "display": "Vital Signs"
43       }
44     ]
45   }
46 ],
47 "code": {
48   "coding": [
49     {
50       "system": "http://snomed.info/sct",
51       "version": "http://snomed.info/sct/900000000000207008/version/20220331",
52       "code": "75367002",
53       "display": "Blood pressure (observable entity)",
54       "_display": {
55         "extension": [
56           {
57             "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
58             "extension": [
59               {
60                 "url": "content",
61                 "valueString": "Blutdruck"
62               }
63             ]
64           }
65         ]
66       }
67     },
68     {
69       "system": "http://loinc.org",
70       "version": "2.72",
71       "code": "85354-9",
72       "display": "Blood pressure panel with all children optional",
73       "_display": {
74         "extension": [
75           {
76             "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
77             "extension": [
78               {
79                 "url": "content",
80                 "valueString": "Blutdruck"
81               }
82             ]
83           }
84         ]
85       }
86     }
87   ]
88 },
89 "effectiveDateTime": "2022-07-10T13:53:44+02:00",
90 "component": [
91   {
92     "code": {
93       "text": "systolisch",
94       "coding": [
95         {
96           "system": "http://snomed.info/sct",
97           "version": "http://snomed.info/sct/900000000000207008/version/20220331",
98           "code": "271649006",
99           "display": "Systolic blood pressure (observable entity)",
100          "_display": {
101            "extension": [
102              {
103                "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
104                "extension": [
105                  {
106                    "url": "content",
107                    "valueString": "systolischer Blutdruck"
108                  }
109                ]
110              }
111            ]
112          }
113        }
114      ]
115    }
116   }
117 ]
118 }
```

```
110     }
111   ]
112 }
113 },
114 {
115   "system": "http://loinc.org",
116   "version": "2.72",
117   "code": "8480-6",
118   "display": "Systolic blood pressure",
119   "_display": {
120     "extension": [
121       {
122         "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
123         "extension": [
124           {
125             "url": "content",
126             "valueString": "systolischer Blutdruck"
127           }
128         ]
129       }
130     ]
131   }
132 }
133 ],
134 },
135 "valueQuantity": {
136   "value": 111,
137   "unit": "mm Hg",
138   "system": "http://unitsofmeasure.org",
139   "code": "mm[Hg]"
140 }
141 },
142 {
143   "code": {
144     "coding": [
145       {
146         "system": "http://snomed.info/sct",
147         "version": "http://snomed.info/sct/900000000000207008/version/20220331",
148         "code": "271650006",
149         "display": "Diastolic blood pressure (observable entity)",
150         "_display": {
151           "extension": [
152             {
153               "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
154               "extension": [
155                 {
156                   "url": "content",
157                   "valueString": "diastolischer Blutdruck"
158                 }
159               ]
160             }
161           ]
162         }
163       }
164     ],
165     "system": "http://loinc.org",
166     "version": "2.72",
167     "code": "8462-4",
168     "display": "Diastolic blood pressure",
169     "_display": {
170       "extension": [
171         {
172           "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
173           "extension": [
174             {
175               "url": "content",
176               "valueString": "diastolischer Blutdruck"
177             }
178           ]
179         }
180       ]
181     }
182   },
183   "text": "diastolisch"
184 },
185 "valueQuantity": {
186   "value": 100,
187   "unit": "mm Hg",
188   "system": "http://unitsofmeasure.org",
189   "code": "mm[Hg]"
190 }
191 }
192 ]
193 ]
194 }
```

2.4.2 Gewicht

Profil: KBV_PR_MIO_DIGA_Observation_Body_Weight

Einheit: kg

SNOMED-Coding: 27113001

LOINC-Coding: 29463-7

Beispiel gemessenes Gewicht:

```
1  {
2  "resourceType": "Observation",
3  "meta": {
4    "versionId": "1",
5    "lastUpdated": "2023-07-10T13:51:51+02:00",
6    "profile": [
7      "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Observation_Body_Weight|1.1.0"
8    ]
9  },
10 "identifier": [
11   {
12     "type": {
13       "coding": [
14         {
15           "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
16           "version": "2.9",
17           "code": "RI",
18           "display": "Resource identifier"
19         }
20       ]
21     },
22     "system": "urn:ietf:rhc:3986",
23     "value": "urn:procurement:weight_result:2|1"
24   }
25 ],
26 "status": "final",
27 "code": {
28   "coding": [
29     {
30       "system": "http://snomed.info/sct",
31       "version": "http://snomed.info/sct/900000000000207008/version/20220331",
32       "code": "27113001",
33       "display": "Body weight (observable entity)",
34       "_display": {
35         "extension": [
36           {
37             "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
38             "extension": [
39               {
40                 "url": "content",
41                 "valueString": "Körpergewicht"
42               }
43             ]
44           }
45         ]
46       }
47     }
48   ],
49   {
50     "system": "http://loinc.org",
51     "version": "2.72",
52     "code": "29463-7",
53     "display": "Body weight",
54     "_display": {
55       "extension": [
56         {
57           "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
58           "extension": [
59             {
60               "url": "content",
61               "valueString": "Körpergewicht"
62             }
63           ]
64         }
65       ]
66     }
67   }
68 ]
69 }
```



```
64     ]
65   }
66 }
67 ]
68 },
69 "subject": {
70   "reference": "urn:procarement:patient:2d931510-d99f-494a-8c67-87feb05e1594"
71 },
72 "performer": [
73   {
74     "reference": "urn:procarement:patient:2d931510-d99f-494a-8c67-87feb05e1594"
75   }
76 ],
77 "effectiveDateTime": "2022-07-10T13:51:51+02:00",
78 "valueQuantity": {
79   "value": 80,
80   "unit": "kg",
81   "system": "http://unitsofmeasure.org",
82   "code": "kg"
83 },
84 "category": [
85   {
86     "coding": [
87       {
88         "system": "http://terminology.hl7.org/CodeSystem/observation-category",
89         "code": "vital-signs"
90       }
91     ]
92   }
93 ],
94 "bodySite": {
95   "coding": [
96     {
97       "system": "http://snomed.info/sct",
98       "version": "http://snomed.info/sct/900000000000207008/version/20220331",
99       "code": "38266002",
100      "display": "Entire body as a whole (body structure)",
101      "_display": {
102        "extension": [
103          {
104            "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
105            "extension": [
106              {
107                "url": "content",
108                "valueString": "Gesamtkörper"
109              }
110            ]
111          }
112        ]
113      }
114    }
115  ]
116 }
117 }
```

2.4.3 Herzfrequenz

Profil: [KBV_PR_MIO_DIGA_Observation_Heart_Rate](#)

Einheit: /min

SNOMED-Coding: 364075005

LOINC-Coding: 8867-4

Beispiel:

```
1 {
2   "resourceType": "Observation",
3   "meta": {
4     "versionId": "1",
```

```
5   "lastUpdated": "2023-07-10T13:52:10+02:00",
6   "profile": [
7     "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Observation_Heart_Rate|1.1.0"
8   ],
9 },
10 "status": "final",
11 "category": [
12   {
13     "coding": [
14       {
15         "system": "http://terminology.hl7.org/CodeSystem/observation-category",
16         "version": "4.0.1",
17         "code": "vital-signs",
18         "display": "Vital Signs"
19       }
20     ]
21   }
22 ],
23 "code": {
24   "coding": [
25     {
26       "system": "http://loinc.org",
27       "version": "2.72",
28       "code": "8867-4",
29       "display": "Heart rate",
30       "_display": {
31         "extension": [
32           {
33             "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
34             "extension": [
35               {
36                 "url": "content",
37                 "valueString": "Herzfrequenz"
38               }
39             ]
40           }
41         ]
42       }
43     },
44     {
45       "system": "http://snomed.info/sct",
46       "version": "http://snomed.info/sct/900000000000207008/version/20220331",
47       "code": "364075005",
48       "display": "Heart rate (observable entity)",
49       "_display": {
50         "extension": [
51           {
52             "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
53             "extension": [
54               {
55                 "url": "content",
56                 "valueString": "Herzfrequenz"
57               }
58             ]
59           }
60         ]
61       }
62     }
63   ]
64 },
65 "identifier": [
66   {
67     "type": {
68       "coding": [
69         {
70           "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
71           "version": "2.9",
72           "code": "RI",
73           "display": "Resource identifier"
74         }
75       ]
76     },
77     "system": "urn:iETF:rfc:3986",
78     "value": "urn:procurement:heart_rate_result:119|1"
79   }
80 ],
81 "subject": {
82   "reference": "urn:procurement:patient:2d931510-d99f-494a-8c67-87feb05e1594"
83 },
84 "performer": [
85   {
86     "reference": "urn:procurement:patient:2d931510-d99f-494a-8c67-87feb05e1594"
87   }
88 ],
89 "effectiveDateTime": "2022-07-10T13:52:10+02:00",
90 "valueQuantity": {
91   "value": 100,
```

```
92     "unit": "per minute",
93     "system": "http://unitsofmeasure.org",
94     "code": "/min"
95   }
96 }
```

2.4.4 Sauerstoffsättigung

Profil: [KBV_PR_MIO_DIGA_Observation_Peripheral_Oxygen_Saturation](#)

Einheit: %

SNOMED-Coding: 431314004

LOINC-Coding: 2708-6

Beispiel:

```
1  {
2    "resourceType": "Observation",
3    "meta": {
4      "versionId": "1",
5      "lastUpdated": "2023-07-10T13:54:53+02:00",
6      "profile": [
7        "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Observation_Peripheral_Oxygen_Saturation|1.1.0"
8      ]
9    },
10   "identifier": [
11     {
12       "type": {
13         "coding": [
14           {
15             "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
16             "version": "2.9",
17             "code": "RI",
18             "display": "Resource identifier"
19           }
20         ]
21       },
22       "system": "urn:ietf:rhc:3986",
23       "value": "urn:procurement:heart_rate_result:180|1"
24     }
25   ],
26   "status": "final",
27   "category": [
28     {
29       "coding": [
30         {
31           "system": "http://terminology.hl7.org/CodeSystem/observation-category",
32           "version": "4.0.1",
33           "code": "vital-signs",
34           "display": "Vital Signs"
35         }
36       ]
37     }
38   ],
39   "code": {
40     "coding": [
41       {
42         "system": "http://snomed.info/sct",
43         "version": "http://snomed.info/sct/900000000000207008/version/20220331",
44         "code": "431314004",
45         "display": "Peripheral oxygen saturation (observable entity)",
46         "display": {
47           "extension": [
48             {
49               "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
50               "extension": [
51                 {
52                   "url": "content",
53                   "valueString": "periphere arterielle Sauerstoffsättigung"
54                 }
55               ]
56             }
57           ]
58         }
59       }
60     ]
61   }
62 }
```

```
54     }
55   ]
56 }
57 ]
58 },
59 },
60 {
61   "system": "http://loinc.org",
62   "version": "2.72",
63   "code": "2708-6",
64   "display": "Oxygen saturation in Arterial blood",
65   "_display": {
66     "extension": [
67       {
68         "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
69         "extension": [
70           {
71             "url": "content",
72             "valueString": "periphere arterielle Sauerstoffsättigung"
73           }
74         ]
75       }
76     ]
77   }
78 }
79 ]
80 },
81 "subject": {
82   "reference": "urn:procarement:patient:2d931510-d99f-494a-8c67-87feb05e1594"
83 },
84 "effectiveDateTime": "2022-07-10T13:54:53+02:00",
85 "valueQuantity": {
86   "value": 90,
87   "unit": "%",
88   "system": "http://unitsofmeasure.org",
89   "code": "%"
90 },
91 "method": {
92   "coding": [
93     {
94       "system": "http://snomed.info/sct",
95       "version": "http://snomed.info/sct/900000000000207008/version/20220331",
96       "code": "448703006",
97       "display": "Pulse oximeter (physical object)",
98       "_display": {
99         "extension": [
100           {
101             "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
102             "extension": [
103               {
104                 "url": "content",
105                 "valueString": "Pulsoximeter"
106               }
107             ]
108           }
109         ]
110       }
111     }
112   ]
113 }
114 }
```

2.4.5 Trockengewicht

Das vom Patienten angegebenen Trockengewicht (Normalgewicht) wird mit dem gleichen Profil gespeichert wie das Gewicht, allerdings wird ein anderer SNOMED-Code verwendet.

Profil: [KBV_PR_MIO_DIGA_Observation_Body_Weight](#)

Einheit: kg

SNOMED-Coding: 400967004

Profil: KBV_PR_MIO_DIGA_Observation_Body_Weight

LOINC-Coding: 29463-7

Beispiel:

```
1  {
2  "resourceType": "Observation",
3  "meta": {
4    "versionId": "1",
5    "lastUpdated": "2023-06-26T13:51:46+02:00",
6    "profile": [
7      "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Observation_Body_Weight|1.1.0"
8    ]
9  },
10 "identifier": [
11   {
12     "type": {
13       "coding": [
14         {
15           "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
16           "version": "2.9",
17           "code": "RI",
18           "display": "Resource identifier"
19         }
20       ]
21     },
22     "system": "urn:ietf:rfc:3986",
23     "value": "urn://fhir.procurement.com/biometric_profile_weight/494281355"
24   }
25 ],
26 "status": "final",
27 "code": {
28   "coding": [
29     {
30       "system": "http://snomed.info/sct",
31       "version": "http://snomed.info/sct/900000000000207008/version/20220331",
32       "code": "400967004",
33       "display": "Baseline weight (observable entity)",
34       "_display": {
35         "extension": [
36           {
37             "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
38             "extension": [
39               {
40                 "url": "content",
41                 "valueString": "Körpergewicht (Trockengewicht)"
42               }
43             ]
44           }
45         ]
46       }
47     }
48   ],
49   {
50     "system": "http://loinc.org",
51     "version": "2.72",
52     "code": "29463-7",
53     "display": "Body weight",
54     "_display": {
55       "extension": [
56         {
57           "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
58           "extension": [
59             {
60               "url": "content",
61               "valueString": "Körpergewicht (Trockengewicht)"
62             }
63           ]
64         }
65       ]
66     }
67   }
68 ],
69 "subject": {
70   "reference": "urn:procurement:patient:2d931510-d99f-494a-8c67-87feb05e1594"
71 },
72 "performer": [
73   {
74     "reference": "urn:procurement:patient:2d931510-d99f-494a-8c67-87feb05e1594"
75   }
76 ]
77 }
```

```

75     }
76   ],
77   "effectiveDateTime": "2023-06-26T13:51:46+02:00",
78   "valueQuantity": {
79     "value": 85.0,
80     "unit": "kg",
81     "system": "http://unitsofmeasure.org",
82     "code": "kg"
83   },
84   "category": [
85     {
86       "coding": [
87         {
88           "system": "http://terminology.hl7.org/CodeSystem/observation-category",
89           "code": "vital-signs"
90         }
91       ]
92     }
93   ],
94   "bodySite": {
95     "coding": [
96       {
97         "system": "http://snomed.info/sct",
98         "version": "http://snomed.info/sct/900000000000207008/version/20220331",
99         "code": "38266002",
100        "display": "Entire body as a whole (body structure)",
101        "_display": {
102          "extension": [
103            {
104              "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
105              "extension": [
106                {
107                  "url": "content",
108                  "valueString": "Gesamtkörper"
109                }
110              ]
111            }
112          ]
113        }
114      }
115    ]
116  }
117 }

```

2.4.6 Temperatur

Profil: [KBV_PR_MIO_DIGA_Observation_Body_Temperature](#)

Einheit: °C

SNOMED-Coding: 386725007

LOINC-Coding: 8310-5

Beispiel:

```

1  {
2    "resourceType": "Observation",
3    "meta": {
4      "versionId": "1",
5      "lastUpdated": "2023-07-10T13:53:53+02:00",
6      "profile": [
7        "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Observation_Body_Temperature|1.1.0"
8      ]
9    },
10   "status": "final",
11   "category": [
12     {
13       "coding": [
14         {
15           "system": "http://terminology.hl7.org/CodeSystem/observation-category",

```

```
16     "version": "4.0.1",
17     "code": "vital-signs",
18     "display": "Vital Signs"
19   }
20 ]
21 }
22 ],
23 "code": {
24   "coding": [
25     {
26       "system": "http://loinc.org",
27       "version": "2.72",
28       "code": "8310-5",
29       "display": "Body temperature",
30       "_display": {
31         "extension": [
32           {
33             "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
34             "extension": [
35               {
36                 "url": "content",
37                 "valueString": "Körpertemperatur"
38               }
39             ]
40           }
41         ]
42       }
43     },
44     {
45       "system": "http://snomed.info/sct",
46       "version": "http://snomed.info/sct/900000000000207008/version/20220331",
47       "code": "386725007",
48       "display": "Body temperature (observable entity)",
49       "_display": {
50         "extension": [
51           {
52             "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
53             "extension": [
54               {
55                 "url": "content",
56                 "valueString": "Körpertemperatur"
57               }
58             ]
59           }
60         ]
61       }
62     }
63   ]
64 },
65 "subject": {
66   "reference": "urn:procarement:patient:2d931510-d99f-494a-8c67-87feb05e1594"
67 },
68 "performer": [
69   {
70     "reference": "urn:procarement:patient:2d931510-d99f-494a-8c67-87feb05e1594"
71   }
72 ],
73 "identifier": [
74   {
75     "type": {
76       "coding": [
77         {
78           "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
79           "version": "2.9",
80           "code": "RI",
81           "display": "Resource identifier"
82         }
83       ]
84     },
85     "system": "urn:ietf:rhc:3986",
86     "value": "urn:procarement:temperature_result:161|1"
87   }
88 ],
89 "effectiveDateTime": "2022-07-10T13:53:53+02:00",
90 "valueQuantity": {
91   "value": 37,
92   "unit": "Celsius",
93   "_unit": {
94     "extension": [
95       {
96         "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
97         "extension": [
98           {
99             "url": "content",
100            "valueString": "Grad Celsius"
101           }
102         ]
103       }
104     ]
105   }
106 }
```

```
103     }
104   ],
105   },
106   "system": "http://unitsofmeasure.org",
107   "code": "Cel"
108 }
109 }
```

2.5 Medikationsplan und Medikamenteneinnahmen

Der vom Patienten angegebene Medikationsplan sowie deren Einnahmen mit der Referenz auf das entsprechende Medikament werden wie folgt exportiert.

2.5.1 Medikamente

Profil: [KBV_PR_MIO_DIGA_Medication](#)

Code: Enthält Freitext mit Produktname und Dosis + Einheit

Form: mögliche Codes: TAB, IIL, KAP, LOE, CRE, TRO, SPR

Ingridient: Enthält Wirkstoff als Freitext

Beispiel:

```
1  {
2    "resourceType": "Medication",
3    "meta": {
4      "versionId": "1",
5      "lastUpdated": "2016-06-29T16:48:53+02:00",
6      "profile": [
7        "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Medication|1.1.0"
8      ]
9    },
10   "identifier": [
11     {
12       "type": {
13         "coding": [
14           {
15             "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
16             "version": "2.9",
17             "code": "RI",
18             "display": "Resource identifier"
19           }
20         ]
21       },
22       "system": "urn:iETF:rFC:3986",
23       "value": "urn:procurement:medication:1|1"
24     }
25   ],
26   "code": {
27     "text": "medication_normal_name, 2 mg"
28   },
29   "extension": [
30     {
31       "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Medication_Type",
32       "valueCodeableConcept": {
33         "coding": [
34           {
35             "system": "http://snomed.info/sct",
36             "version": "http://snomed.info/sct/900000000000207008/version/20220131",
37             "code": "763158003",
38             "display": "Medicinal product (product)",
39             "_display": {
```



```

40     "extension": [
41       {
42         "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
43         "extension": [
44           {
45             "url": "content",
46             "valueString": "Fertigarzneimittel"
47           }
48         ]
49       }
50     ]
51   }
52 }
53 ]
54 }
55 ],
56 ],
57 "form": {
58   "coding": [
59     {
60       "system": "https://fhir.kbv.de/CodeSystem/KBV_CS_SFHIR_KBV_DARREICHUNGSFORM",
61       "version": "1.08",
62       "code": "TAB",
63       "display": "Tabletten"
64     }
65   ],
66   "text": "Tabletten"
67 },
68 "ingredient": [
69   {
70     "itemCodeableConcept": {
71       "text": "medication_chemical_agent"
72     }
73   }
74 ]
75 }

```

2.5.2 Medikationsplan

Profil: [KBV_PR_MIO_DIGA_MedicationStatement_Medication_Information](#)

Dosage- System: <http://snomed.info/sct>, Unterstützte Codes: 26643006(oral), 6064005(topical),

>Route: 47625008(intravenous), 47625008(injection), 34206005(subcutaneous),
447694001(inhalation)

Dosage- Enthält Einnahmeplan als Freitext, siehe Beispiele.

>Text:

Beispiel tägliche Medikation:

```

1  {
2    "resourceType": "MedicationStatement",
3    "identifier": [
4      {
5        "type": {
6          "coding": [
7            {
8              "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
9              "version": "2.9",
10             "code": "RI",
11             "display": "Resource identifier"
12           }
13         ]
14       },
15       "system": "urn:ietf:rhc:3986",
16       "value": "urn:procurement:medication_information:1|1"
17     ]
18   },

```

```

19  "meta": {
20    "versionId": "1",
21    "lastUpdated": "2016-06-29T16:48:53+02:00",
22    "profile": [
23      "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_MedicationStatement_Medication_Information|1.1.0"
24    ]
25  },
26  "informationSource": {
27    "reference": "urn:procarement:patient:2d931510-d99f-494a-8c67-87feb05e1594"
28  },
29  "status": "active",
30  "_status": {
31    "extension": [
32      {
33        "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
34        "extension": [
35          {
36            "url": "content",
37            "valueString": "Aktiv"
38          }
39        ]
40      }
41    ]
42  },
43  "reasonCode": [
44    {
45      "text": "reason 1"
46    }
47  ],
48  "medicationReference": {
49    "reference": "urn:procarement:medication:1|1"
50  },
51  "subject": {
52    "reference": "urn:procarement:patient:2d931510-d99f-494a-8c67-87feb05e1594"
53  },
54  "effectivePeriod": {
55    "start": "2016-06-29T16:48:53+02:00"
56  },
57  "dosage": [
58    {
59      "text": "Taglich \nMorgens: 1\n\nAbends: 1\n",
60      "route": {
61        "coding": [
62          {
63            "system": "http://snomed.info/sct",
64            "version": "http://snomed.info/sct/9000000000000207008/version/20220331",
65            "code": "26643006",
66            "display": "Oral route (qualifier value)",
67            "_display": {
68              "extension": [
69                {
70                  "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
71                  "extension": [
72                    {
73                      "url": "content",
74                      "valueString": "oral"
75                    }
76                  ]
77                }
78              ]
79            }
80          }
81        ],
82        "text": "oral"
83      }
84    }
85  ]
86 }

```

Beispiel wochentliche Medikation:

```

1  {
2    "resourceType": "MedicationStatement",
3    "identifier": [
4      {
5        "type": {
6          "coding": [
7            {
8              "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
9              "version": "2.9",
10             "code": "RI",
11             "display": "Resource identifier"
12           }
13         ]
14       }
15     ]
16   }

```

```

15     "system": "urn:ietf:rfc:3986",
16     "value": "urn:procurement:medication_information:9|1"
17   },
18 ],
19 "meta": {
20   "versionId": "1",
21   "lastUpdated": "2016-06-29T16:48:53+02:00",
22   "profile": [
23     "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_MedicationStatement_Medication_Information|1.1.0"
24   ]
25 },
26 "informationSource": {
27   "reference": "urn:procurement:patient:2d931510-d99f-494a-8c67-87feb05e1594"
28 },
29 "status": "active",
30 "_status": {
31   "extension": [
32     {
33       "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
34       "extension": [
35         {
36           "url": "content",
37           "valueString": "Aktiv"
38         }
39       ]
40     }
41   ]
42 },
43 "reasonCode": [
44   {
45     "text": "reason 1"
46   }
47 ],
48 "medicationReference": {
49   "reference": "urn:procurement:medication:9|1"
50 },
51 "subject": {
52   "reference": "urn:procurement:patient:2d931510-d99f-494a-8c67-87feb05e1594"
53 },
54 "effectivePeriod": {
55   "start": "2016-06-29T16:48:53+02:00"
56 },
57 "dosage": [
58   {
59     "text": "1 St., Wöchentlich (Montag,Dienstag,Donnerstag,Freitag,Sonntag)",
60     "route": {
61       "coding": [
62         {
63           "system": "http://snomed.info/sct",
64           "version": "http://snomed.info/sct/900000000000207008/version/20220331",
65           "code": "26643006",
66           "display": "Oral route (qualifier value)",
67           "_display": {
68             "extension": [
69               {
70                 "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
71                 "extension": [
72                   {
73                     "url": "content",
74                     "valueString": "oral"
75                   }
76                 ]
77               }
78             ]
79           }
80         }
81       ],
82       "text": "oral"
83     }
84   }
85 ]
86 }

```

Beispiel monatliche Medikation:

```

1  {
2    "resourceType": "MedicationStatement",
3    "identifier": [
4      {
5        "type": {
6          "coding": [
7            {
8              "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
9              "version": "2.9",
10             "code": "RI",

```

```

11         "display": "Resource identifizier"
12     }
13 }
14 },
15 "system": "urn:ietf:rfc:3986",
16 "value": "urn:procurement:medication_information:9|1"
17 }
18 ],
19 "meta": {
20     "versionId": "1",
21     "lastUpdated": "2016-06-29T16:48:53+02:00",
22     "profile": [
23         "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_MedicationStatement_Medication_Information|1.1.0"
24     ]
25 },
26 "informationSource": {
27     "reference": "urn:procurement:patient:2d931510-d99f-494a-8c67-87feb05e1594"
28 },
29 "status": "active",
30 "_status": {
31     "extension": [
32         {
33             "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
34             "extension": [
35                 {
36                     "url": "content",
37                     "valueString": "Aktiv"
38                 }
39             ]
40         }
41     ]
42 },
43 "reasonCode": [
44     {
45         "text": "reason 1"
46     }
47 ],
48 "medicationReference": {
49     "reference": "urn:procurement:medication:9|1"
50 },
51 "subject": {
52     "reference": "urn:procurement:patient:2d931510-d99f-494a-8c67-87feb05e1594"
53 },
54 "effectivePeriod": {
55     "start": "2023-07-10T00:00:00+00:00",
56     "end": "2023-09-08T00:00:00+00:00"
57 },
58 "dosage": [
59     {
60         "text": "1 St., Monatlich, Beginnend am Mo, 10. Jul 2023, Endet Fr, 8. Sep 2023",
61         "route": {
62             "coding": [
63                 {
64                     "system": "http://snomed.info/sct",
65                     "version": "http://snomed.info/sct/900000000000207008/version/20220331",
66                     "code": "26643006",
67                     "display": "Oral route (qualifier value)",
68                     "_display": {
69                         "extension": [
70                             {
71                                 "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
72                                 "extension": [
73                                     {
74                                         "url": "content",
75                                         "valueString": "oral"
76                                     }
77                                 ]
78                             }
79                         ]
80                     }
81                 }
82             ],
83             "text": "oral"
84         }
85     }
86 ]
87 }

```

Beispiel Medikation nach Bedarf:

```

1  {
2    "resourceType": "MedicationStatement",
3    "identifier": [
4      {
5        "type": {

```

```
6     "coding": [  
7       {  
8         "system": "http://terminology.hl7.org/CodeSystem/v2-0203",  
9         "version": "2.9",  
10        "code": "RI",  
11        "display": "Resource identifier"  
12      }  
13    ]  
14  },  
15  "system": "urn:ietf:rhc:3986",  
16  "value": "urn:procarement:medication_information:11|1"  
17  }  
18  ],  
19  "meta": {  
20    "versionId": "1",  
21    "lastUpdated": "2016-06-29T16:48:53+02:00",  
22    "profile": [  
23      "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_MedicationStatement_Medication_Information|1.1.0"  
24    ]  
25  },  
26  "informationSource": {  
27    "reference": "urn:procarement:patient:2d931510-d99f-494a-8c67-87feb05e1594"  
28  },  
29  "status": "active",  
30  "_status": {  
31    "extension": [  
32      {  
33        "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",  
34        "extension": [  
35          {  
36            "url": "content",  
37            "valueString": "Aktiv"  
38          }  
39        ]  
40      }  
41    ]  
42  },  
43  "reasonCode": [  
44    {  
45      "text": "reason 1"  
46    }  
47  ],  
48  "medicationReference": {  
49    "reference": "urn:procarement:medication:11|1"  
50  },  
51  "subject": {  
52    "reference": "urn:procarement:patient:2d931510-d99f-494a-8c67-87feb05e1594"  
53  },  
54  "effectivePeriod": {  
55    "start": "2016-06-29T16:48:53+02:00"  
56  },  
57  "dosage": [  
58    {  
59      "text": "1 St., Nach Bedarf",  
60      "route": {  
61        "coding": [  
62          {  
63            "system": "http://snomed.info/sct",  
64            "version": "http://snomed.info/sct/9000000000000207008/version/20220331",  
65            "code": "26643006",  
66            "display": "Oral route (qualifier value)",  
67            "_display": {  
68              "extension": [  
69                {  
70                  "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",  
71                  "extension": [  
72                    {  
73                      "url": "content",  
74                      "valueString": "oral"  
75                    }  
76                  ]  
77                }  
78              ]  
79            }  
80          }  
81        ],  
82        "text": "oral"  
83      }  
84    ]  
85  }  
86 }
```

2.5.3 Medikamenteneinnahmen

Profil: [KBV_PR_MIO_DIGA_MedicationAdministration_Medication_Intake](#)

Dosage- System: <http://snomed.info/sct> Unterstützte Codes:26643006 (oral), 6064005 (topical),
>Route: 47625008 (intravenous), 47625008 (injection), 34206005 (subcutaneous), 447694001 (inhalation)

Dosage- Enthält Menge der Einnahme.

>Dose:

Beispiel:

```
1  {
2    "meta": {
3      "versionId": "1",
4      "lastUpdated": "2023-07-10T13:54:33+02:00",
5      "profile": [
6        "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_MedicationAdministration_Medication_Intake|1.1.0"
7      ]
8    },
9    "identifier": [
10     {
11       "type": {
12         "coding": [
13           {
14             "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
15             "version": "2.9",
16             "code": "RI",
17             "display": "Resource identifier"
18           }
19         ]
20       },
21       "system": "urn:ietf:rfc:3986",
22       "value": "urn:procurement:medication_intake:25|1"
23     }
24   ],
25   "resourceType": "MedicationAdministration",
26   "status": "completed",
27   "medicationReference": {
28     "reference": "urn:procurement:medication:1|1"
29   },
30   "effectivePeriod": {
31     "start": "2023-07-10T04:00:00+02:00",
32     "end": "2023-07-10T08:00:00+02:00"
33   },
34   "performer": [
35     {
36       "actor": {
37         "reference": "urn:procurement:patient:2d931510-d99f-494a-8c67-87feb05e1594"
38       }
39     }
40   ],
41   "subject": {
42     "reference": "urn:procurement:patient:2d931510-d99f-494a-8c67-87feb05e1594"
43   },
44   "dosage": {
45     "dose": {
46       "value": 1,
47       "unit": "Stueck",
48       "system": "https://fhir.kbv.de/CodeSystem/KBV_CS_SFHIR_BMP_DOSIEREINHEIT",
49       "code": "1"
50     },
51     "route": {
52       "coding": [
53         {
54           "system": "http://snomed.info/sct",
55           "version": "http://snomed.info/sct/900000000000207008/version/20220331",
56           "code": "26643006",
57           "display": "Oral route (qualifier value)",
58           "_display": {
59             "extension": [
```

```
60     {
61         "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
62         "extension": [
63             {
64                 "url": "content",
65                 "valueString": "oral"
66             }
67         ]
68     }
69 ]
70 }
71 }
72 ],
73 "text": "oral"
74 }
75 }
76 }
```

2.6 Probleme

2.6.1 Allergien

Die vom Patienten eingegebenen Allergien werden als [AllergyIntolerance-Resource](#) entsprechend dem Profil [KBV_PR_MIO_DIGA_AllergyIntolerance](#) abgelegt. Die Allergien werden dabei nur durch Freitext beschrieben und enthalten keinen Code.

Beispiel:

```
1  {
2  "resourceType": "AllergyIntolerance",
3  "meta": {
4  "versionId": "1",
5  "lastUpdated": "2023-06-26T13:51:46+02:00",
6  "profile": [
7  "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_AllergyIntolerance|1.1.0"
8  ]
9  },
10 "identifier": [
11 {
12 "type": {
13 "coding": [
14 {
15 "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
16 "version": "2.9",
17 "code": "RI",
18 "display": "Resource identifier"
19 }
20 ]
21 },
22 "system": "urn:ietf:rfc:3986",
23 "value": "urn:procurement:biometric_profile_allergy:494281355.1"
24 }
25 ],
26 "clinicalStatus": {
27 "coding": [
28 {
29 "system": "http://terminology.hl7.org/CodeSystem/allergyintolerance-clinical",
30 "version": "4.0.1",
31 "code": "active",
32 "display": "Active",
33 "_display": {
34 "extension": [
35 {
36 "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
37 "extension": [
38 {
39 "url": "content",
40 "valueString": "Aktiv"
41 }
42 ]
43 }
44 ]
45 }
46 }
```

```
47   ]
48   },
49   "code": {
50     "text": "Hundehaare"
51   },
52   "patient": {
53     "reference": "urn:procarement:patient:2d931510-d99f-494a-8c67-87feb05e1594"
54   },
55   "recorder": {
56     "reference": "urn:procarement:patient:2d931510-d99f-494a-8c67-87feb05e1594"
57   }
58 }
```

2.6.2 Diagnosen

Die vom Patienten eingegebenen Diagnosen werden als **Condition-Resource** entsprechend dem Profil **KBV_PR_MIO_DIGA_Condition_Problem** abgelegt.

Die Diagnosen werden durch den ICD-Code nach dem Code-System <http://fhir.de/CodeSystem/dimdi/icd-10-gm> beschrieben sowie durch einen Freitext.

Beispiel:

```
1  {
2    "resourceType": "Condition",
3    "meta": {
4      "versionId": "1",
5      "lastUpdated": "2023-07-10T13:55:10+02:00",
6      "profile": [
7        "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Condition_Problem|1.1.0"
8      ]
9    },
10   "identifier": [
11     {
12       "type": {
13         "coding": [
14           {
15             "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
16             "version": "2.9",
17             "code": "RI",
18             "display": "Resource identifier"
19           }
20         ]
21       },
22       "system": "urn:ietf:rhc:3986",
23       "value": "urn:procarement:patient_diagnosis:16|1"
24     }
25   ],
26   "clinicalStatus": {
27     "coding": [
28       {
29         "system": "http://terminology.hl7.org/CodeSystem/condition-clinical",
30         "version": "4.0.1",
31         "code": "active",
32         "display": "Active",
33         "_display": {
34           "extension": [
35             {
36               "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
37               "extension": [
38                 {
39                   "url": "content",
40                   "valueString": "Aktiv"
41                 }
42               ]
43             }
44           ]
45         }
46       }
47     ]
48   },
49   "category": [
50     {
51       "coding": [
52         {
```



```
53     "system": "http://snomed.info/sct",
54     "version": "http://snomed.info/sct/900000000000207008/version/20220331",
55     "code": "409586006",
56     "display": "Complaint (finding)",
57     "_display": {
58       "extension": [
59         {
60           "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
61           "extension": [
62             {
63               "url": "content",
64               "valueString": "Beschwerde"
65             }
66           ]
67         }
68       ]
69     }
70   }
71 ]
72 },
73 ],
74 "onsetDateTime": "2023-07-10T13:55:10+02:00",
75 "code": {
76   "coding": [
77     {
78       "system": "http://fhir.de/CodeSystem/dimdi/icd-10-gm",
79       "version": "2021",
80       "code": "I50",
81       "display": "Herzschwäche"
82     }
83   ],
84   "text": "Herzschwäche (I50)"
85 },
86 "recorder": {
87   "reference": "urn:procarement:patient:2d931510-d99f-494a-8c67-87feb05e1594"
88 },
89 "subject": {
90   "reference": "urn:procarement:patient:2d931510-d99f-494a-8c67-87feb05e1594"
91 }
92 }
```

2.7 Fragebögen und Fragebogen-Antworten

Neben den Fragebogen-Antworten werden die dazugehörigen Fragebögen in den FHIR Export eingebunden.

2.7.1 Fragebögen

Die Fragebögen werden als [Questionnaire-Resource](#) entsprechend dem Profil [KBV_PR_MIO_DIGA_Questionnaire](#) exportiert.

Die folgenden Fragebögen können im FHIR Export enthalten sein.

- BDI Fragebogen
- EQ5D-L Fragebogen
- ESS Fragebogen
- KCCQ-12 Fragebogen
- WHO-5 Fragebogen
- 2-Fragen-Test

Beispiel 2-Fragen-Test:

```
1  {
2    "id": "2ft",
3    "url": "urn:procurement:two_question_survey:2ft|1#2ft",
4    "resourceType": "Questionnaire",
5    "identifier": [
6      {
7        "type": {
8          "coding": [
9            {
10             "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
11             "version": "2.9",
12             "code": "RI",
13             "display": "Resource identifier"
14           }
15         ]
16       },
17       "system": "urn:ietf:rhc:3986",
18       "value": "urn:procurement:two_question_survey:2ft|1"
19     ]
20   },
21   "meta": {
22     "versionId": "1",
23     "lastUpdated": "2022-11-08T10:47:05+01:00",
24     "profile": [
25       "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Questionnaire|1.1.0"
26     ]
27   },
28   "language": "de",
29   "title": "Fragebogen zur seelischen Gesundheit (2FT)",
30   "status": "active",
31   "date": "2021-01-01",
32   "item": [
33     {
34       "linkId": "/intro",
35       "text": "Phasen von Traurigkeit, Niedergeschlagenheit und Verzweiflung kennt jeder. Sie gehören zu unserem Leben genauso wie die glücklichen Momente. Wann daraus jedoch eine Krankheit, wie die „Depression“ wird, ist oft nicht leicht zu erkennen. Mit Hilfe des Zwei-Fragen-Tests können wir eine erste Einschätzung Ihrer momentanen Situation vornehmen. Dieser Test wird laut medizinischer Leitlinie als Screening für Depression empfohlen.",
36       "type": "display",
37       "_type": {
38         "extension": [
39           {
40             "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
41             "extension": [
42               {
43                 "url": "content",
44                 "valueString": "Anzeige"
45               }
46             ]
47           }
48         ]
49       }
50     },
51     {
52       "linkId": "/duration",
53       "text": "Die Bearbeitungsdauer beträgt ca. 1 Minute.",
54       "type": "display",
55       "_type": {
56         "extension": [
57           {
58             "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
59             "extension": [
60               {
61                 "url": "content",
62                 "valueString": "Anzeige"
63               }
64             ]
65           }
66         ]
67       }
68     },
69     {
70       "linkId": "/question_1",
71       "text": "Fühlten Sie sich im letzten Monat häufig niedergeschlagen, traurig, bedrückt oder hoffnungslos?",
72       "type": "choice",
73       "_type": {
74         "extension": [
75           {
76             "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
77             "extension": [
78               {
79                 "url": "content",
80                 "valueString": "Auswahl"
81               }
82             ]
83           }
84         ]
85       }
86     }
87   ]
88 }
```

```
184     ]
185   },
186   "answerOption": [
187     {
188       "extension": [
189         {
190           "url": "http://hl7.org/fhir/StructureDefinition/questionnaire-optionPrefix",
191           "valueString": "1"
192         }
193       ],
194       "valueCoding": {
195         "system": "https://fhir.procurement.com/CodeSystem/custom",
196         "code": "question_1Answer1",
197         "display": "ja"
198       }
199     },
200     {
201       "extension": [
202         {
203           "url": "http://hl7.org/fhir/StructureDefinition/questionnaire-optionPrefix",
204           "valueString": "0"
205         }
206       ],
207       "valueCoding": {
208         "system": "https://fhir.procurement.com/CodeSystem/custom",
209         "code": "question_1Answer0",
210         "display": "nein"
211       }
212     }
213   ]
214 },
215 {
216   "linkId": "/question_2",
217   "text": "Hatten Sie im letzten Monat deutlich weniger Lust und Freude an Dingen, die Sie sonst gerne tun?",
218   "type": "choice",
219   "_type": {
220     "extension": [
221       {
222         "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
223         "extension": [
224           {
225             "url": "content",
226             "valueString": "Auswahl"
227           }
228         ]
229       }
230     ]
231   },
232   "answerOption": [
233     {
234       "extension": [
235         {
236           "url": "http://hl7.org/fhir/StructureDefinition/questionnaire-optionPrefix",
237           "valueString": "1"
238         }
239       ],
240       "valueCoding": {
241         "system": "https://fhir.procurement.com/CodeSystem/custom",
242         "code": "question_2Answer1",
243         "display": "ja"
244       }
245     },
246     {
247       "extension": [
248         {
249           "url": "http://hl7.org/fhir/StructureDefinition/questionnaire-optionPrefix",
250           "valueString": "0"
251         }
252       ],
253       "valueCoding": {
254         "system": "https://fhir.procurement.com/CodeSystem/custom",
255         "code": "question_2Answer0",
256         "display": "nein"
257       }
258     }
259   ]
260 }
261 ]
262 }
```

2.7.2 Fragebogen-Antworten

Die Antworten werden als [QuestionnaireResponse-Resource](#) entsprechend dem Profil [KBV_PR_MIO_DIGA_QuestionnaireResponse](#) exportiert.

Beispiel 2-Fragen-Test:

```
1  {
2  "resourceType": "QuestionnaireResponse",
3  "id": "25",
4  "meta": {
5    "versionId": "1",
6    "lastUpdated": "2023-07-10T13:53:37+02:00",
7    "profile": [
8      "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_QuestionnaireResponse|1.1.0"
9    ]
10 },
11 "identifier": {
12   "type": {
13     "coding": [
14       {
15         "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
16         "version": "2.9",
17         "code": "RI",
18         "display": "Resource identifier"
19       }
20     ]
21   },
22   "system": "urn:ietf:rfc:3986",
23   "value": "urn:procurement:survey_result:25|1"
24 },
25 "questionnaire": "urn:procurement:two_question_survey:2ft|1#2ft",
26 "status": "completed",
27 "subject": {
28   "reference": "urn:procurement:patient:2d931510-d99f-494a-8c67-87feb05e1594"
29 },
30 "authored": "2023-07-10T13:53:37+02:00",
31 "item": [
32   {
33     "linkId": "/question_1",
34     "answer": [
35       {
36         "valueCoding": {
37           "system": "https://fhir.procurement.com/CodeSystem/custom",
38           "version": "1",
39           "code": "question_1Answer0",
40           "display": "nein"
41         }
42       }
43     ]
44   },
45   {
46     "linkId": "/question_2",
47     "answer": [
48       {
49         "valueCoding": {
50           "system": "https://fhir.procurement.com/CodeSystem/custom",
51           "version": "1",
52           "code": "question_2Answer1",
53           "display": "ja"
54         }
55       }
56     ]
57   }
58 ]
59 }
```

2.8 DIGA App

Die ProHerz App wird als [Device-Resource](#) entsprechend dem Profil [KBV_PR_MIO_DIGA_Device_DIGA](#) exportiert. Darin enthalten sind App-Name, DiGA-VE-ID sowie die PZN.

Beispiel:

```
1 {
2   "resourceType": "Device",
3   "id": "53a39e7e-8bc8-4f58-b1a0-de7c0ace5f18",
4   "meta": {
5     "versionId": "1",
6     "lastUpdated": "2022-11-08T10:47:05+01:00",
7     "profile": [
8       "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Device_DIGA|1.1.0"
9     ]
10  },
11  "identifier": [
12    {
13      "type": {
14        "text": "DiGA-VE-ID"
15      },
16      "value": "01823001"
17    }
18  ],
19  "definition": {
20    "reference": "urn:uuid:0547b754-5e6f-4632-8782-9c3ee87795d3"
21  },
22  "deviceName": [
23    {
24      "name": "ProHerz",
25      "type": "user-friendly-name",
26      "_type": {
27        "extension": [
28          {
29            "url": "https://fhir.kbv.de/StructureDefinition/KBV_EX_Base_Terminology_German",
30            "extension": [
31              {
32                "url": "content",
33                "valueString": "Modellname"
34              }
35            ]
36          }
37        ]
38      }
39    }
40  ],
41  "type": {
42    "coding": [
43      {
44        "system": "http://fhir.de/CodeSystem/ifa/pzn",
45        "code": "18789175"
46      }
47    ]
48  }
49 }
```

2.9 DIGA Hersteller

ProCurement wird als [Organization-Resource](#) entsprechend dem Profil [KBV_PR_MIO_DIGA_Organization_Manufacturer](#) exportiert.

Beispiel:

```
1 {
2   "resourceType": "Organization",
3   "id": "cc6732e8-b51c-4c9f-8e3f-c80143e5b39b",
4   "meta": {
5     "versionId": "1",
6     "lastUpdated": "2022-11-08T10:47:05+01:00",
7     "profile": [
8       "https://fhir.kbv.de/StructureDefinition/KBV_PR_MIO_DIGA_Organization_Manufacturer|1.1.0"
9     ]
10  },
11  "identifier": [
12    {
13      "type": {
14        "coding": [
15          {
16            "system": "http://terminology.hl7.org/CodeSystem/v2-0203",
17            "version": "2.9",
18            "code": "RI",

```

```
19         "display": "Resource identifier"
20     }
21 ]
22 },
23 "system": "urn:ietf:rhc:3986",
24 "value": "urn:uuid:cc6732e8-b51c-4c9f-8e3f-c80143e5b39b"
25 }
26 ],
27 "name": "ProCurement GmbH"
28 }
```