



SECURE EMR+

A Partnership Solution by INMEDIATA and prognocIS

FHIR API Documentation

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AUDIENCE

The URLs mentioned will be sandbox or dummy URLs.

1. FHIR LOGIN

URL: <https://oauth.secureemrplus.com/prognocisoauth/oauth/token>

[partnerapi.prognocis.com] this will be any client URL

Request Parameters: Method = POST

Param Name	Data Type	Mandatory	Length	Comments
client_id	String	Yes	5	This will be provided by PrognocIS to third party vendor, to provide access to specific clinic
client_secret	String	Yes	50	This will be provided by PrognocIS to third party vendor, to provide access to specific clinic
grant_type	String	Yes	8	Default value to be provided is "password"
username	String	Yes	30	This will be provided by PrognocIS to third party vendor, to provide access to specific clinic
password	String	Yes	30	This will be provided by PrognocIS to third party vendor, to provide access to specific clinic

Response Parameters

Param Name	Data Type	Always Available in Response	Length	Comments
access_token	String	Yes		
baseUrl	String	Yes		This url is to be used to re-request all other FHIR api
personId	String	Yes		Unique identifier of the logged in person
expires_in	String	Yes		Token expires time.

2. PATIENT SEARCH

Patient Search is depends upon the below **request/search parameters**

Param Name	Data Type	Mandatory	Length
name	String (FirstName^LastName)	No	50
birthdate	String (MM-DD-YYYY)	No	10
birthdateRange	String(lt; gt; eq; le; ge;)	No	3
Gender	String	No	1

Note: For patient search at least 2 param are required i.e Name and DOB OR Name and Gender.

Response Parameters

Param Name	Data Type	Always Available in Response	Length
resource	Object		
resourceType	String (Patient)	Yes	10
id	String	Yes	1
active	String (true/false)	Yes	
name	Array	Yes	
family	String	Yes	50
given	String	Yes	50
Suffix	String	No	10
telecom	Array		
system	String	No	10
value	String	No	20
use	String	No	10

URL: <https://sandbox.secureemrplus.com/prognocis/fhir/Patient?name=Dummy&birthdate=&birthdateRange=&gender=M>

Example Response JSON:

```
{
  "resourceType": "Bundle",
  "id": "075b5d98-0b5d-4b0d-9dae-af5f85939be6",
  "meta": {
    "lastUpdated": "2017-08-09T17:39:33.884+05:30"
  },
}
```

```
"type": "searchset",
"total": 2,
"link": [
  {
    "relation": "self",
    "url": "https://sandbox.secureemrplus.com/prognocis/fhir/Patient/?birthdate=-1"&gender=-1&name=alice"
  }
],
"entry": [
  {
    "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Patient/581",
    "resource": {
      "resourceType": "Patient",
      "id": "581",
      "active": true,
      "name": [
        {
          "family": "Newman",
          "given": [
            "Alice",
            "Jones"
          ],
          "suffix": [
            "Mrs."
          ]
        }
      ],
      "telecom": [
        {
          "system": "phone",
          "value": "(555)-723-1544",
          "use": "home"
        },
        {
          "system": "phone",
          "value": "(555)-777-1234",
          "use": "mobile"
        }
      ],
      "gender": "female",
      "birthDate": "1970-05-01",
      "address": [
        {
          "line": [
            "1357, Amber Dr"
          ]
        }
      ]
    }
  }
]
```

```
    ],
    "city": "Beaverton",
    "postalCode": "97006",
    "country": "USA"
  }
],
"maritalStatus": {
  "coding": [
    {
      "code": "UNK",
      "display": "unknown"
    }
  ]
},
"communication": [
  {
    "language": {
      "coding": [
        {
          "code": "EN",
          "display": "EN"
        }
      ]
    }
  }
]
}
},
{
  "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Patient/576",
  "resource": {
    "resourceType": "Patient",
    "id": "576",
    "active": true,
    "name": [
      {
        "family": "Newman",
        "given": [
          "Alice",
          "Jones"
        ],
        "suffix": [
          "Mr."
        ]
      }
    ]
  }
},
```

```
"telecom": [  
  {  
    "system": "phone",  
    "value": "(555)-723-1544",  
    "use": "home"  
  },  
  {  
    "system": "phone",  
    "value": "(555)-777-1234",  
    "use": "mobile"  
  }  
],  
"gender": "female",  
"birthDate": "1970-05-01",  
"address": [  
  {  
    "line": [  
      "1357, Amber Dr"  
    ],  
    "city": "Beaverton",  
    "postalCode": "97006",  
    "country": "USA"  
  }  
],  
"maritalStatus": {  
  "coding": [  
    {  
      "code": "UNK",  
      "display": "unknown"  
    }  
  ]  
},  
"communication": [  
  {  
    "language": {  
      "coding": [  
        {  
          "code": "EN",  
          "display": "EN"  
        }  
      ]  
    }  
  }  
]
```


] }
}

3. PATIENT SELECTION

After selection Patient it shows the Patient Data and as well as resources for that particular patient

Request Parameters:

Param Name	Data Type	Mandatory	Length	Comments
PatientId	String	Yes	10	

Response Parameters:

Example Response JSON:

URL: <https://sandbox.secureemrplus.com/prognocis/fhir/Patient/581>

```
{
  "resourceType": "Patient",
  "id": "581",
  "active": true,
  "name": [
    {
      "family": "Newman",
      "given": [
        "Alice",
        "Jones"
      ],
      "suffix": [
        "Mrs."
      ]
    }
  ],
  "telecom": [
    {
      "system": "phone",
      "value": "(555)-723-1544",
      "use": "home"
    },
    {
      "system": "phone",
      "value": "(555)-777-1234",
      "use": "mobile"
    }
  ],
  "gender": "female",
  "birthDate": "1970-05-01",
```

```
"address": [
  {
    "line": [
      "1357, Amber Dr"
    ],
    "city": "Beaverton",
    "postalCode": "97006",
    "country": "USA"
  }
],
"maritalStatus": {
  "coding": [
    {
      "code": "UNK",
      "display": "unknown"
    }
  ]
},
"communication": [
  {
    "language": {
      "coding": [
        {
          "code": "EN",
          "display": "EN"
        }
      ]
    }
  }
]
}
```

4. ENCOUNTER RESOURCE

URL: https://sandbox.secureemrplus.com/prognocis/fhir/Encounter/?_id=595&date&encdateRange

Request Parameters

Param Name	Data Type	Mandatory	Length	Comments
_id	String	Yes	10	Id of the select patient from patient list api
date	String(YYYY-MM-DD)	No	12	Encounter date
encdateRange	String(< ; > ; = ; <= ; >= ;)	No	3	Encounter date search in specific range

Response Parameters

Param Name	Data Type	Always Available in Response	Length	Comments
resource	Object			
resourceType	String (Encounter)	Yes	50	
id	String	Yes	10	
status	String	Yes	30	
type	Array	Yes		
coding	Array	Yes		
code	String	Conditional	10	If SNOMED code is present
display	String	Yes	50	
subject	Reference	Yes	50	Here Reference is Patient
participant	String	Yes	10	Here Participant is always attending doc
Period	String	Yes	30	Start is always. End is conditionally mandatory
reason	Array	Conditional		If Reason for the Encounter is specified
text	String		255	Reason for the Encounter

Example Response JSON:

```
{
```

```

"resourceType": "Bundle",
"id": "6643d36b-3292-4945-9e2c-c4743559128c",
"meta": {
  "lastUpdated": "2017-08-09T17:48:17.708+05:30"
},
"type": "searchset",
"total": 2,
"link": [
  {
    "relation": "self",
    "url": "https://sandbox.secureemrplus.com/prognocis/fhir/Encounter/?_id=595&date=-1"
  }
],
"entry": [
  {
    "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Encounter/2085",
    "resource": {
      "resourceType": "Encounter",
      "id": "2085",
      "status": "in-progress",
      "class": {
        "system": "http://hl7.org/fhir/encounter-class",
        "display": "Ambulatory"
      },
      "type": [
        {
          "coding": [
            {
              "display": "Office Visit"
            }
          ]
        }
      ],
      "subject": {
        "reference": "Patient/595",
        "display": "Ms. Lavon_DUMMY Earle_dummy"
      },
      "participant": [
        {
          "individual": {
            "display": "Provider1dummy AMDUMMY"
          }
        }
      ]
    }
  }
]

```

```
    },
    {
      "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Encounter/2084",
      "resource": {
        "resourceType": "Encounter",
        "id": "2084",
        "status": "in-progress",
        "class": {
          "system": "http://hl7.org/fhir/encounter-class",
          "display": "Ambulatory"
        },
        "type": [
          {
            "coding": [
              {
                "display": "Office Visit"
              }
            ]
          }
        ],
        "subject": {
          "reference": "Patient/595",
          "display": "Ms. Lavon_DUMMY Earle_dummy"
        },
        "participant": [
          {
            "individual": {
              "display": "Provider1dummy AMDUMMY"
            }
          }
        ],
        "reason": [
          {
            "text": "DUMMY Secure Mesg P1 Location A"
          }
        ]
      }
    }
  ]
}
```

5. ENCOUNTER INDIVIDUAL RESOURCE

Request Parameters

Param Name	Data Type	Mandatory	Length	Comments
encounterId	String	Yes	10	

Response Parameters

Param Name	Data Type	Always Available in Response	Length	Comments
resource	Object			
resourceType	String (Encounter)	Yes	50	
id	String	Yes	10	
status	String	Yes	30	
type	Array	Yes		
coding	Array	Yes		
code	String	Conditional	10	If SNOMED code is present
display	String	Yes	50	
subject	Reference	Yes	50	Here Reference is Patient
participant	String	Yes	10	Here Participant is always attending doc
Period	String	Yes	30	Start and end date.
reason	Array	Conditional		If Reason for the Encounter is specified
text	String		255	Reason for the Encounter

URL: <https://sandbox.secureemrplus.com/prognocis/fhir/Encounter/2085>

Example Response JSON:

```
{
  "resourceType": "Encounter",
  "id": "2085",
  "status": "in-progress",
  "class": {
    "system": "http://hl7.org/fhir/encounter-class",
    "display": "Ambulatory"
  },
  "type": [
```

```
{
  "coding": [
    {
      "display": "Office Visit"
    }
  ]
},
"subject": {
  "reference": "Patient/595",
  "display": "Ms. Lavon_DUMMY Earle_dummy"
},
"participant": [
  {
    "individual": {
      "display": "Provider1dummy AMDUMMY"
    }
  }
]
}
```


6. SMOKING STATUS

Request Parameters

Param Name	Data Type	Mandatory	Length	Comments
PatientId	String	Yes	10	
category	String (Value always SH)	Yes	10	

Response Parameters

Param Name	Data Type	Always Available in Response	Length	Comments
resource	Object			
resourceType	String (Smoking Status)	Yes	50	
id	String	Yes	10	Id for the Smoking Status
status	String	Yes	30	Status of smoking status
category	Array	Yes		
coding	Array	Yes		
code	String	Yes	10	It's always social-history
display	String	Yes	50	It's always Social History
code	Array	Conditional		If Loinc code present
coding	Array	Conditional		If Loinc code present
code	String	Conditional	30	If Loinc code present
display	String	Conditional	255	If Loinc code present
subject	String	Yes	50	Here Reference is Patient
issued	String	Yes	50	This is issued date
valueString	String	Yes	255	Actual Value or Result of the smoking status
effectivePeriod	Object			
start	String	Conditional		Start Date
end	String	Conditional		End Date

URL: https://sandbox.secureemrplus.com/prognocis/fhir/Observation/?_id=581&category=SH

Example Response JSON:

```
{
  "resourceType": "Bundle",
  "id": "62831d58-589b-4337-94a6-4d297dea3af3",
  "meta": {
```

```
"lastUpdated": "2017-08-23T17:44:28.620+05:30"
},
"type": "searchset",
"total": 1,
"link": [
  {
    "relation": "self",
    "url": "https://sandbox.secureemrplus.com/prognocis/fhir/Observation/?
_id=581&category=SH"
  }
],
"entry": [
  {
    "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Observation/2233",
    "resource": {
      "resourceType": "Observation",
      "id": "2233",
      "status": "preliminary",
      "category": [
        {
          "coding": [
            {
              "code": "social-history",
              "display": "Social History"
            }
          ]
        }
      ],
      "code": {
        "coding": [
          {
            "code": "72166-2",
            "display": "Current Smoking status"
          }
        ]
      },
      "subject": {
        "display": "Newman, Alice"
      },
      "effectivePeriod": {
        "start": "2015-06-22T00:00:00+05:30"
      },
      "issued": "2017-07-04T11:09:45.000+05:30",
      "valueString": "Current every day smoker (Snomed : 449868002)"
    }
  }
]
```

] }
}

7. VITAL RESOURCE

Request Parameters

Param Name	Data Type	Mandatory	Length	Comments
PatientId	String	Yes	10	
category	String (Value always VT)	Yes	10	

Response Parameters

Param Name	Data Type	Always Available in Response	Length	Comments
resource	Object			
resourceType	String (Vital Signs)	Yes	50	
id	String	Yes	10	Id for the Vitals Sign
status	String	Yes	30	Status of Vitals Sign
category	Array	Yes		
coding	Array	Yes		
code	String	Yes	10	It's always Vitals
display	String	Yes	50	It's always Vitals
code	Array	Conditional		If Loinc code present
coding	Array	Conditional		If Loinc code present
code	String	Conditional	30	If Loinc code present
display	String	Conditional	255	If Loinc code present
subject	String	Yes	50	Here Reference is Patient
issued	String	Yes	50	This is issued date
valueString	String	Yes	255	Actual Value or Result of Vitals Sign

URL: https://sandbox.secureemrplus.com/prognocis/fhir/Observation/?_id=581&category=VT

Example Response JSON:

```
{
  "resourceType": "Bundle",
  "id": "c6759511-8314-48e8-b22a-9aea0697e5ac",
  "meta": {
    "lastUpdated": "2017-08-23T17:45:25.103+05:30"
  },
  "type": "searchset",
  "total": 9,
```

```
"link": [
  {
    "relation": "self",
    "url": "https://sandbox.secureemrplus.com/prognocis/fhir/Observation/?
_id=581&category=VT"
  }
],
"entry": [
  {
    "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Observation/2167",
    "resource": {
      "resourceType": "Observation",
      "id": "2167",
      "status": "preliminary",
      "category": [
        {
          "coding": [
            {
              "code": "vitals",
              "display": "Vitals"
            }
          ]
        }
      ],
      "code": {
        "coding": [
          {
            "code": "8302-2",
            "display": "Height (cm)"
          }
        ]
      },
      "subject": {
        "display": "Newman, Alice"
      },
      "issued": "2017-07-01T10:53:21.000+05:30",
      "valueString": "177"
    }
  },
  {
    "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Observation/2168",
    "resource": {
      "resourceType": "Observation",
      "id": "2168",
      "status": "preliminary",
      "category": [
```

```
{
  "coding": [
    {
      "code": "vitals",
      "display": "Vitals"
    }
  ]
},
"code": {
  "coding": [
    {
      "code": "3141-9",
      "display": "Weight (kg)"
    }
  ]
},
"subject": {
  "display": "Newman, Alice"
},
"issued": "2017-07-01T10:53:21.000+05:30",
"valueString": "88"
},
{
  "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Observation/2169",
  "resource": {
    "resourceType": "Observation",
    "id": "2169",
    "status": "preliminary",
    "category": [
      {
        "coding": [
          {
            "code": "vitals",
            "display": "Vitals"
          }
        ]
      }
    ]
  },
  "code": {
    "coding": [
      {
        "code": "8480-6",
        "display": "BP Systolic"
      }
    ]
  }
}
```

```
    ]
  },
  "subject": {
    "display": "Newman, Alice"
  },
  "issued": "2017-07-01T10:53:21.000+05:30",
  "valueString": "145"
}
},
{
  "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Observation/2170",
  "resource": {
    "resourceType": "Observation",
    "id": "2170",
    "status": "preliminary",
    "category": [
      {
        "coding": [
          {
            "code": "vitals",
            "display": "Vitals"
          }
        ]
      }
    ],
    "code": {
      "coding": [
        {
          "code": "8462-4",
          "display": "BP Diastolic"
        }
      ]
    },
    "subject": {
      "display": "Newman, Alice"
    },
    "issued": "2017-07-01T10:53:21.000+05:30",
    "valueString": "88"
  }
},
{
  "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Observation/2171",
  "resource": {
    "resourceType": "Observation",
    "id": "2171",
    "status": "preliminary",
```

```
"category": [
  {
    "coding": [
      {
        "code": "vitals",
        "display": "Vitals"
      }
    ]
  }
],
"code": {
  "coding": [
    {
      "code": "8867-4",
      "display": "Heart Rate"
    }
  ]
},
"subject": {
  "display": "Newman, Alice"
},
"issued": "2017-07-01T10:53:21.000+05:30",
"valueString": "80"
}
},
{
  "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Observation/2172",
  "resource": {
    "resourceType": "Observation",
    "id": "2172",
    "status": "preliminary",
    "category": [
      {
        "coding": [
          {
            "code": "vitals",
            "display": "Vitals"
          }
        ]
      }
    ]
  }
},
"code": {
  "coding": [
    {
      "code": "2710-2",
      "display": "O2 Percent BldC Oximetry"
    }
  ]
}
```



```
    }
  ]
},
"subject": {
  "display": "Newman, Alice"
},
"issued": "2017-07-01T10:53:21.000+05:30",
"valueString": "95"
}
},
{
  "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Observation/2173",
  "resource": {
    "resourceType": "Observation",
    "id": "2173",
    "status": "preliminary",
    "category": [
      {
        "coding": [
          {
            "code": "vitals",
            "display": "Vitals"
          }
        ]
      }
    ],
    "code": {
      "coding": [
        {
          "code": "3150-0",
          "display": "Inhaled Oxygen Concentration"
        }
      ]
    },
    "subject": {
      "display": "Newman, Alice"
    },
    "issued": "2017-07-01T10:53:21.000+05:30",
    "valueString": "36"
  }
},
{
  "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Observation/2174",
  "resource": {
    "resourceType": "Observation",
    "id": "2174",
```

```
"status": "preliminary",
"category": [
  {
    "coding": [
      {
        "code": "vitals",
        "display": "Vitals"
      }
    ]
  }
],
"code": {
  "coding": [
    {
      "code": "8310-5",
      "display": "Body Temperature (Celsius)"
    }
  ]
},
"subject": {
  "display": "Newman, Alice"
},
"issued": "2017-07-01T10:53:21.000+05:30",
"valueString": "38"
}
},
{
  "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Observation/2175",
  "resource": {
    "resourceType": "Observation",
    "id": "2175",
    "status": "preliminary",
    "category": [
      {
        "coding": [
          {
            "code": "vitals",
            "display": "Vitals"
          }
        ]
      }
    ]
  }
},
"code": {
  "coding": [
    {
      "code": "9279-1",
```

```
      "display": "Respiratory Rate"
    }
  ]
},
"subject": {
  "display": "Newman, Alice"
},
"issued": "2017-07-01T10:53:21.000+05:30",
"valueString": "18"
}
}
]
```

8. LABORATORY TEST RESOURCE

Request Parameters

Param Name	Data Type	Mandatory	Length	Comments
_id	String	Yes	10	Logged in personId
category	String (Value always order)	Yes	10	

Response Parameters

Param Name	Data Type	Always Available in Response	Length	Comments
resource	Object			
resourceType	String (Laboratory Test)	Yes	50	
id	String	Yes	10	Id for the Vitals Sign
status	String	Yes	30	Status of Vitals Sign
category	Array	Yes		
coding	Array	Yes		
code	String	Yes	10	It's always Vitals
display	String	Yes	50	It's always Vitals
code	Array	Conditional		If Loinc code present
coding	Array	Conditional		If Loinc code present
code	String	Conditional	30	If Loinc code present
display	String	Conditional	255	If Loinc code present
subject	String	Yes	50	Here Reference is Patient
issued	String	Yes	50	This is issued date
valueString	String	Yes	255	Actual Value or Result of Vitals Sign

URL: https://sandbox.secureemrplus.com/prognocis/fhir/Observation/labObservation/?category=order&_id=581

Example Response JSON:

```
{
  "resourceType": "Bundle",
  "id": "49e59892-c8a9-477b-ac62-0b4fb0e4d0b5",
  "meta": {
    "lastUpdated": "2017-08-23T17:45:41.794+05:30"
  }
}
```

```
    },
    "type": "searchset",
    "total": 6,
    "link": [
      {
        "relation": "self",
        "url": "https://sandbox.secureemrplus.com/prognocis/fhir/Observation/?
category=order&labId=581"
      }
    ],
    "entry": [
      {
        "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Observation/1118",
        "resource": {
          "resourceType": "Observation",
          "id": "1118",
          "category": [
            {
              "coding": [
                {
                  "code": "Laboratory",
                  "display": "Lab"
                }
              ]
            }
          ],
          "code": {
            "coding": [
              {
                "code": "5048-4",
                "display": "Antinuclear Antibodies"
              }
            ]
          },
          "valueCodeableConcept": {
            "coding": [
              {
                "code": "359788000",
                "display": "Antinuclear antibodies"
              }
            ],
            "text": "Antinuclear antibodies"
          }
        }
      },
      {

```

```
"fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Observation/1119",
"resource": {
  "resourceType": "Observation",
  "id": "1119",
  "category": [
    {
      "coding": [
        {
          "code": "Laboratory",
          "display": "Lab"
        }
      ]
    }
  ],
  "code": {
    "coding": [
      {
        "code": "1988-5",
        "display": "C-Reactive Protein (CRP), Quant"
      }
    ]
  },
  "valueCodeableConcept": {
    "coding": [
      {
        "code": "55235003",
        "display": "Quantitative C reactive protein measurement"
      }
    ],
    "text": "Quantitative C reactive protein measurement"
  }
},
{
  "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Observation/1115",
  "resource": {
    "resourceType": "Observation",
    "id": "1115",
    "category": [
      {
        "coding": [
          {
            "code": "Laboratory",
            "display": "Lab"
          }
        ]
      }
    ]
  }
}
```

```
    }
  ],
  "code": {
    "coding": [
      {
        "code": "2284-8",
        "display": "Folate (Folic Acid)"
      }
    ]
  },
  "valueCodeableConcept": {
    "coding": [
      {
        "code": "60306005",
        "display": "Folic acid serum"
      }
    ],
    "text": "Folic acid serum"
  }
},
{
  "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Observation/1120",
  "resource": {
    "resourceType": "Observation",
    "id": "1120",
    "category": [
      {
        "coding": [
          {
            "code": "Laboratory",
            "display": "Lab"
          }
        ]
      }
    ],
    "code": {
      "coding": [
        {
          "code": "11572-5",
          "display": "Rheumatoid Arthritis Factor"
        }
      ]
    },
    "valueCodeableConcept": {
      "coding": [
```

```
    {
      "code": "54921001",
      "display": "Rheumatoid factor"
    }
  ],
  "text": "Rheumatoid factor"
}
},
{
  "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Observation/1121",
  "resource": {
    "resourceType": "Observation",
    "id": "1121",
    "category": [
      {
        "coding": [
          {
            "code": "Laboratory",
            "display": "Lab"
          }
        ]
      }
    ],
    "code": {
      "coding": [
        {
          "code": "4537-7",
          "display": "Sed Rate, Westergren"
        }
      ]
    },
    "valueCodeableConcept": {
      "coding": [
        {
          "code": "6354009",
          "display": "ESR Westergren"
        }
      ]
    },
    "text": "ESR Westergren"
  }
},
{
  "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Observation/1116",
  "resource": {
```



```
"resourceType": "Observation",
"id": "1116",
"category": [
  {
    "coding": [
      {
        "code": "Laboratory",
        "display": "Lab"
      }
    ]
  }
],
"code": {
  "coding": [
    {
      "code": "2132-9",
      "display": "Vitamin B12"
    }
  ]
},
"valueCodeableConcept": {
  "coding": [
    {
      "code": "14598005",
      "display": "Vitamin B12"
    }
  ],
  "text": "Vitamin B12"
}
}
]
```

9. MEDICATION STATEMENT :

Request Parameters

Param Name	Data Type	Mandatory	Length	Comments
PatientId	String	Yes	10	

Response Parameters

Param Name	Data Type	Always Available in Response	Length	Comments
resource	Object			
resourceType	String (Medication-Statement)	Yes		
id	String	Yes	10	Id for the Medication
status	String	Yes	30	Status of Medication (active, inactive)
medicationCodeableConcept	String	Yes		
coding	Array	Yes		
code	String	Yes	10	rxnorm code
display	String	Yes	255	Medication name
system	String	Yes	50	rxnorm system
dateAsserted	String	Yes	50	Medication pre-scribed Date
informationSource	String	Yes	50	Providers Details
subject	String	Yes	50	Here Reference is Patient
taken	String	Yes	1	If taken Y otherwise N
reasoncode	Array			
coding	Array			
code	String	Yes	10	rxnorm code
display	String	Yes	255	Medication name
system	String	Yes	50	rxnorm system
dosage	Array			
text	String	Yes	255	Free text dosage instructions e.g. SIG
timing	Object			When medication should be administered

timeOfDay	Array			
asNeededBoolean	String	Yes		As Needed
maxDosePerAdministration	String	Conditional		Upper limit on medication per administration
value	String	Conditional	10	
unit	String	Conditional	10	

URL: https://sandbox.secureemrplus.com/prognocis/fhir/MedicationStatement/?_id=576

Example Response JSON:

```
{
  "resourceType": "Bundle",
  "id": "67cd2dc6-3667-4ff6-bf0b-c87605544b1e",
  "meta": {
    "lastUpdated": "2017-08-09T17:24:47.638+05:30"
  },
  "type": "searchset",
  "total": 2,
  "link": [
    {
      "relation": "self",
      "url": "https://sandbox.secureemrplus.com/prognocis/fhir/MedicationStatement/?_id=576"
    }
  ],
  "entry": [
    {
      "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/MedicationStatement/1228",
      "resource": {
        "resourceType": "MedicationStatement",
        "id": "1228",
        "status": "active",
        "medicationCodeableConcept": {
          "coding": [
            {
              "code": "167106",
              "display": "clindamycin HCl 300 mg oral capsule"
            }
          ]
        },
        "dateAsserted": "2015-06-22T00:00:00+05:30",
        "informationSource": {

```

```
    "reference": "ONC2015_DEV_WAVE3",
    "display": "Albert Davis"
  },
  "subject": {
    "reference": "Patient/576",
    "display": "Newman, Alice"
  },
  "taken": "y",
  "reasonCode": [
    {
      "coding": [
        {
          "code": "386661006"
        },
        {
          "code": "ICD10",
          "display": "R50.9"
        }
      ]
    },
    {
      "text": "Fever"
    }
  ],
  "dosage": [
    {
      "text": "1 Every 8 Hours PRN",
      "timing": {
        "repeat": {
          "period": 0,
          "timeOfDay": [
            "Every 8 Hours"
          ]
        }
      }
    },
    {
      "asNeededBoolean": false,
      "maxDosePerAdministration": {
        "value": 3,
        "unit": "Capsule"
      }
    }
  ]
},
{
  "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/MedicationStatement/1229",
  "resource": {
```

```
"resourceType": "MedicationStatement",
"id": "1229",
"status": "active",
"medicationCodeableConcept": {
  "coding": [
    {
      "code": "161068",
      "display": "Tylenol 500 mg oral capsule"
    }
  ]
},
"dateAsserted": "2015-06-22T00:00:00+05:30",
"informationSource": {
  "reference": "ONC2015_DEV_WAVE3",
  "display": "Albert Davis"
},
"subject": {
  "reference": "Patient/576",
  "display": "Newman, Alice"
},
"taken": "y",
"reasonCode": [
  {
    "coding": [
      {
        "code": "161068",
        "display": "Tylenol 500 mg oral capsule"
      }
    ]
  }
],
"dosage": [
  {
    "text": "1 As Needed PRN",
    "timing": {
      "repeat": {
        "period": 10,
        "timeOfDay": [
          "As Needed"
        ]
      }
    }
  }
],
"asNeededBoolean": false,
"maxDosePerAdministration": {
  "value": 10,
  "unit": "Capsule"
}
```

```
}  
}  
]  
}  
}  
]  
}
```

10. MEDICATION INDIVIDUAL RESOURCE

Request Parameters

Param Name	Data Type	Mandatory	Length	Comments
PatientId	String	Yes	10	
MedicationId	String	Yes	10	

Response Parameters

Param Name	Data Type	Always Available in Response	Length	Comments
resource	Object			
resourceType	String (Medication-Statement)	Yes		
id	String	Yes	10	Id for the Medication
status	String	Yes	30	Status of Medication (active, inactive)
medicationCodeableConcept	String	Yes		
coding	Array	Yes		
code	String	Yes	10	rxnorm code
display	String	Yes	255	Medication name
system	String	Yes	50	rxnorm system
dateAsserted	String	Yes	50	Medication pre-scribed Date
informationSource	String	Yes	50	Providers Details
subject	String	Yes	50	Here Reference is Patient
taken	String	Yes	1	If taken Y otherwise N
reasoncode	Array			
coding	Array			
code	String	Yes	10	rxnorm code
display	String	Yes	255	Medication name
system	String	Yes	50	rxnorm system
dosage	Array			
text	String	Yes	255	Free text dosage instructions e.g. SIG

timing	Object			When medication should be administered
timeOfDay	Array			
asNeededBoolean	String	Yes		As Needed
maxDosePerAdministration	String	Conditional		Upper limit on medication per administration
value	String	Conditional	10	
unit	String	Conditional	10	

URL: <https://sandbox.secureemrplus.com/prognocis/fhir/MedicationStatement/1228>

Example Response JSON:

```
{
  "resourceType": "MedicationStatement",
  "id": "1228",
  "status": "active",
  "medicationCodeableConcept": {
    "coding": [
      {
        "code": "167106",
        "display": "clindamycin HCl 300 mg oral capsule"
      }
    ]
  },
  "dateAsserted": "2015-06-22T00:00:00+05:30",
  "informationSource": {
    "reference": "ONC2015_DEV_WAVE3",
    "display": "Albert Davis"
  },
  "subject": {
    "reference": "Patient/576",
    "display": "Newman, Alice"
  },
  "taken": "y",
  "reasonCode": [
    {
      "coding": [
        {
          "code": "386661006"
        }
      ]
    },
    {
      "code": "ICD10",
    }
  ]
}
```



```
      "display": "R50.9"
    }
  ],
  "text": "Fever"
}
],
"dosage": [
{
  "text": "1 Every 8 Hours PRN",
  "timing": {
    "repeat": {
      "period": 0,
      "timeOfDay": [
        "Every 8 Hours"
      ]
    }
  }
},
"asNeededBoolean": false,
"maxDosePerAdministration": {
  "value": 3,
  "unit": "Capsule"
}
}
]
}
```

11. ALLERGY INTOLERANCE RESOURCE

Request Parameters

Param Name	Data Type	Mandatory	Length	Comments
PatientId	String	Yes	10	

Response Parameters

Param Name	Data Type	Always Available in Response	Length	Comments
resource	Object			
resourceType	String (AllergyIntolerance)	Yes		
id	String	Yes	10	Id for the Allergy
clinicalStatus	String	Yes	30	Clinical Status of Medication(active, inactive)
verificationStatus	String	Yes	30	Verification Status
type	String	Yes	50	type of Allergy
category	Array			Which type of category
criticality	String	Yes	10	
patient	String	Yes	50	Patient Details
recorder	String	Yes	50	Provider Details
reaction	Array			
substance	Object			
coding	Array			
system	String	Yes	50	rxnorm system
code	String	Yes	10	rxnorm code
display	String	Yes	255	Allergy name
text	String	Yes	255	Allergy name
manifestation	Array			
coding	Array			
system	String	Yes	50	snomed system
code	String	Yes	10	snomed code
display	String	Yes	255	Reaction
text	String	Yes	255	Reaction or comments
Onset	String	Yes	50	onset date
severity	String	Yes	50	severity of allergy

URL: https://sandbox.secureemrplus.com/prognocis/fhir/AllergyIntolerance/?_id=581

Example Response JSON:

```
{
  "resourceType": "Bundle",
  "id": "44ae7949-5abd-48dd-a886-975e0942d207",
  "meta": {
    "lastUpdated": "2017-08-10T13:33:07.567+05:30"
  },
  "type": "searchset",
  "total": 2,
  "link": [
    {
      "relation": "self",
      "url": "https://sandbox.secureemrplus.com/prognocis/fhir/AllergyIntolerance/?_id=581"
    }
  ],
  "entry": [
    {
      "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/AllergyIntolerance/1257",
      "resource": {
        "resourceType": "AllergyIntolerance",
        "id": "1257",
        "clinicalStatus": "active",
        "verificationStatus": "confirmed",
        "type": "allergy",
        "category": [
          "medication"
        ],
        "criticality": "low",
        "patient": {
          "display": "Newman, Alice"
        },
        "recorder": {
          "display": "Admin, Admin"
        },
        "reaction": [
          {
            "substance": {
              "coding": [
                {
                  "system": "http://www.nlm.nih.gov/research/umls/rxnorm",
                  "code": "7980",
                  "display": "Penicillin G"
                }
              ]
            }
          }
        ]
      }
    }
  ]
}
```

```

    }
  ],
  "text": "Penicillin G",
  "manifestation": [
    {
      "coding": [
        {
          "system": "http://snomed.info/sct",
          "code": "247472004",
          "display": "Hives"
        }
      ],
      "text": "Hives"
    }
  ],
  "onset": "2017-08-10T13:33:07+05:30",
  "severity": "moderate"
}
]
}
},
{
  "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/AllergyIntolerance/1256",
  "resource": {
    "resourceType": "AllergyIntolerance",
    "id": "1256",
    "clinicalStatus": "active",
    "verificationStatus": "confirmed",
    "type": "allergy",
    "category": [
      "medication"
    ],
    "criticality": "low",
    "patient": {
      "display": "Newman, Alice"
    },
    "recorder": {
      "display": "Admin, Admin"
    },
    "reaction": [
      {
        "substance": {
          "coding": [
            {

```

```
      "system": "http://www.nlm.nih.gov/research/umls/rxnorm",
      "code": "733",
      "display": "Ampicillin"
    }
  ],
  "text": "Ampicillin"
},
"manifestation": [
  {
    "coding": [
      {
        "system": "http://snomed.info/sct",
        "code": "247472004",
        "display": "Hives"
      }
    ],
    "text": "Hives"
  }
],
"onset": "2017-08-10T13:33:07+05:30",
"severity": "moderate"
}
]
}
]
}
```

12. ALLERGY INTOLERANCE INDIVIDUAL RESOURCE

Request Parameters

Param Name	Data Type	Mandatory	Length	Comments
PatientId	String	Yes	10	
AllergyId	String	Yes	10	

Response Parameters

Param Name	Data Type	Always Available in Response	Length	Comments
resource	Object			
resourceType	String (AllergyIntolerance)	Yes		
id	String	Yes	10	Id for the Allergy
clinicalStatus	String	Yes	30	Clinical Status of Medication(active, inactive)
verificationStatus	String	Yes	30	Verification Status
type	String	Yes	50	type of Allergy
category	Array			Which type of category
criticality	String	Yes	10	
patient	String	Yes	50	Patient Details
recorder	String	Yes	50	Provider Details
reaction	Array			
substance	Object			
coding	Array			
system	String	Yes	50	rxnorm system
code	String	Yes	10	rxnorm code
display	String	Yes	255	Allergy name
text	String	Yes	255	Allergy name
manifestation	Array			
coding	Array			
system	String	Yes	50	snomed system
code	String	Yes	10	snomed code
display	String	Yes	255	Reaction
text	String	Yes	255	Reaction or comments
Onset	String	Yes	50	onset date

severity	String	Yes	50	severity of allergy
----------	--------	-----	----	---------------------

URL: <https://sandbox.securemrplus.com/prognocis/fhir/AllergyIntolerance/1257>

Example Response JSON:

```
{
  "resourceType": "AllergyIntolerance",
  "id": "1257",
  "clinicalStatus": "active",
  "verificationStatus": "confirmed",
  "type": "allergy",
  "category": [
    "medication"
  ],
  "criticality": "low",
  "patient": {
    "display": "Newman, Alice"
  },
  "recorder": {
    "display": "Admin, Admin"
  },
  "reaction": [
    {
      "substance": {
        "coding": [
          {
            "system": "http://www.nlm.nih.gov/research/umls/rxnorm",
            "code": "7980",
            "display": "Penicillin G"
          }
        ],
        "text": "Penicillin G"
      },
      "manifestation": [
        {
          "coding": [
            {
              "system": "http://snomed.info/sct",
              "code": "247472004",
              "display": "Hives"
            }
          ],
          "text": "Hives"
        }
      ],
      "onset": "2017-08-10T13:37:27+05:30",

```

```
    "severity": "moderate"  
  }  
]  
}
```


13. IMMUNIZATION RESOURCE

Request Parameters

Param Name	Data Type	Mandatory	Length	Comments
PatientId	String	Yes	10	

Response Parameters

Param Name	Data Type	Always Available in Response	Length	Comments
resource	Object			
resourceType	String (Immunization)	Yes		
id	String	Yes	10	Id for the Immunization
status	String	Yes	30	Status of the Immunization
vaccineCode	Object			
coding	Array			
system	String	Yes	50	CVX System
code	String	Yes	10	CVX code
text	String	Yes	55	Vaccine name
patient	Object			
display	String	Yes	50	Patient Details
encounter	Object			
display	String	Yes	50	Provider Details
date	String		50	Date
location	Object			
display	String	Yes		Location details
manufacturer	Object			
display	String		100	Manufacturer Name
lotnumber	String	Yes	50	Lotnumber
expirationDate	String	Yes	50	expirationDate
practitioner	Array			
actor.display		Yes	50	Provider Details

URL: https://sandbox.secureemrplus.com/prognocis/fhir/immunization/?_id=581

Example Response JSON:

```
{
  "resourceType": "Bundle",
  "id": "1e0fbb5b-3eb9-411b-a6aa-b8b8b86863f3",
  "meta": {
    "lastUpdated": "2017-08-10T15:13:42.098+05:30"
  },
  "type": "searchset",
  "total": 3,
  "link": [
    {
      "relation": "self",
      "url": "https://sandbox.secureemrplus.com/prognocis/fhir/Immunization/?_id=581"
    }
  ],
  "entry": [
    {
      "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Immunization/642",
      "resource": {
        "resourceType": "Immunization",
        "id": "642",
        "status": "completed",
        "vaccineCode": {
          "coding": [
            {
              "code": "88"
            }
          ]
        },
        "text": "Influenza virus vaccine"
      },
      "patient": {
        "display": "Newman, Alice"
      },
      "encounter": {
        "display": "Enc - 1"
      },
      "date": "2014-05-10T00:00:00+05:30",
      "location": {
        "display": "NPP01"
      },
      "manufacturer": {
        "display": "Immuno Inc."
      },
      "lotNumber": "1",
      "expirationDate": "2018-06-30",
      "practitioner": [
        {

```

```
    "actor": {
      "display": "Tracy Davis"
    }
  ]
},
{
  "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Immunization/643",
  "resource": {
    "resourceType": "Immunization",
    "id": "643",
    "status": "completed",
    "vaccineCode": {
      "coding": [
        {
          "code": "166"
        }
      ],
      "text": "influenza, intradermal, quadrivalent, preservative"
    },
    "patient": {
      "display": "Newman, Alice"
    },
    "encounter": {
      "display": "Enc - 1"
    },
    "date": "2015-06-22T00:00:00+05:30",
    "location": {
      "display": "NPP01"
    },
    "note": [
      {
        "text": "Immunization was not given - Patient rejected immunization"
      }
    ]
  }
},
{
  "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Immunization/644",
  "resource": {
    "resourceType": "Immunization",
    "id": "644",
    "status": "completed",
    "vaccineCode": {
      "coding": [
```

```
    {
      "code": "106"
    }
  ],
  "text": "Tetanus and diphtheria toxoids"
},
"patient": {
  "display": "Newman, Alice"
},
"encounter": {
  "display": "Enc - 1"
},
"date": "2012-01-04T00:00:00+05:30",
"location": {
  "display": "NPP01"
},
"manufacturer": {
  "display": "Immuno Inc."
},
"lotNumber": "2",
"expirationDate": "2018-09-30",
"practitioner": [
  {
    "actor": {
      "display": "Tracy Davis"
    }
  }
]
}
]
```

14. IMMUNIZATION INDIVIDUAL RESOURCE

Request Parameters

Param Name	Data Type	Mandatory	Length	Comments
PatientId	String	Yes	10	
ImmunizationId	String	Yes	10	

Response Parameters

Param Name	Data Type	Always Available in Response	Length	Comments
resource	Object			
resourceType	String (Immunization)	Yes		
id	String	Yes	10	Id for the Immunization
status	String	Yes	30	Status of the Immunization
vaccineCode	Object			
coding	Array			
system	String	Yes	50	CVX System
code	String	Yes	10	CVX code
text	String	Yes	55	Vaccine name
patient	Object			
display	String	Yes	50	Patient Details
encounter	Object			
display	String	Yes	50	Provider Details
date	String		50	Date
location	Object			
display	String	Yes		Location details
manufacturer	Object			
display	String		100	Manufacturer Name
lotnumber	String	Yes	50	Lotnumber
expirationDate	String	Yes	50	expirationDate
practitioner	Array			
actor.display		Yes	50	Provider Details

URL: <https://sandbox.secureemrplus.com/prognocis/fhir/Immunization/642>

Example Response JSON:

```
{
  "resourceType": "Immunization",
  "id": "642",
  "status": "completed",
  "vaccineCode": {
    "coding": [
      {
        "code": "88"
      }
    ],
    "text": "Influenza virus vaccine"
  },
  "patient": {
    "display": "Newman, Alice"
  },
  "encounter": {
    "display": "Enc - 1"
  },
  "date": "2014-05-10T00:00:00+05:30",
  "location": {
    "display": "NPP01"
  },
  "manufacturer": {
    "display": "Immuno Inc." },
  "lotNumber": "1",
  "expirationDate": "2018-06-30",
  "practitioner": [
    {
      "actor": {
        "display": "Tracy Davis"
      }
    }
  ]
}
```

15. CARE TEAM MEMBER

Request Parameter:

Param Name	Data Type	Mandatory	Length	Comments
PatientId	String	Yes	10	

Response Parameter:

Param Name	Data Type	Always Available in Response	Length	Comments
resource	Object			
resourceType	String (CareTeam)	Yes		
id	String	Yes	10	Id for the care team
status	String	Yes	30	Status of the care team
subject	String	Yes	50	Here Reference is Patient
reference	Object			
display	String	Yes	50	Patient Details
context	String	Yes	50	Encounter details
reference	Object			
display	String	Yes	50	Encounter details
participant	Array			
member.display	String	No	50	Provider Details
reasonCode	Array			
coding	Array			
system	String	Yes	50	snomed System
code	String	Yes	10	Snomed code

URL: https://sandbox.secureemrplus.com/prognocis/fhir/CareTeam/?_id=581

Example Response JSON:

```
{
  "resourceType": "Bundle",
  "id": "e9af5b61-a99e-456c-8334-7ff0086acc8a",
  "meta": {
    "lastUpdated": "2017-08-10T16:54:37.507+05:30"
  },
  "type": "searchset",
  "total": 1,
  "link": [
```

```
{
  "relation": "self",
  "url": "https://sandbox.secureemrplus.com/prognocis/fhir/CareTeam/?_id=581"
},
"entry": [
  {
    "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/CareTeam/2012",
    "resource": {
      "resourceType": "CareTeam",
      "id": "2012",
      "status": "active",
      "category": [
        {
          "coding": [
            {
              "code": "encounter",
              "display": "Encounter"
            }
          ]
        }
      ],
      "subject": {
        "reference": "Patient/581",
        "display": "Newman, Alice"
      },
      "context": {
        "reference": "Encounter/2012",
        "display": "Enc - 1"
      },
      "participant": [
        {
          "member": {
            "display": "Albert Davis"
          }
        }
      ],
      "reasonCode": [
        {
          "coding": [
            {
              "system": "http://snomed.info/sct",
              "code": "386661006"
            }
          ]
        }
      ]
    }
  }
]
```



```
]
}
}
]
}
```

16. CARE TEAM MEMBER INDIVIDUAL RESOURCE

Request Parameter:

Param Name	Data Type	Mandatory	Length	Comments
PatientId	String	Yes	10	
careTeamId	String	Yes	10	

Response Parameter:

Param Name	Data Type	Always Available in Response	Length	Comments
resource	Object			
resourceType	String (CareTeam)	Yes		
id	String	Yes	10	Id for the care team
status	String	Yes	30	Status of the care team
subject	String	Yes	50	Here Reference is Patient
reference	Object			
display	String	Yes	50	Patient Details
context	String	Yes	50	Encounter details
reference	Object			
display	String	Yes	50	Encounter details
participant	Array			
member.display	String	No	50	Provider Details
reasonCode	Array			
coding	Array			
system	String	Yes	50	snomed System
code	String	Yes	10	Snomed code

Example Response JSON:

URL: <https://sandbox.secureemrplus.com/prognocis/fhir/CareTeam/2012>

```
{
  "resourceType": "CareTeam",
  "id": "2012",
  "status": "active",
  "category": [
    {
      "coding": [
        {
          "code": "encounter",
```

```
        "display": "Encounter"
      }
    ]
  },
  "subject": {
    "reference": "Patient/581",
    "display": "Newman, Alice"
  },
  "context": {
    "reference": "Encounter/2012",
    "display": "Enc - 1"
  },
  "participant": [
    {
      "member": {
        "display": "Albert Davis"
      }
    }
  ],
  "reasonCode": [
    {
      "coding": [
        {
          "system": "http://snomed.info/sct",
          "code": "386661006"
        }
      ]
    }
  ]
}
```

17. DEVICE

Request Parameters

Param Name	Data Type	Mandatory	Length	Comments
PatientId	String	Yes	10	

Response Parameters

Param Name	Data Type	Always Available in Response	Length	Comments
resource	Object			
resourceType	String (Device)	Yes		
id	String	Yes	10	Id for the Device
udi	Object	Yes	30	
deviceIdentifier	String	Yes	50	deviceIdentifier of the device
name	String		100	Name of the Device
issuer	String	Yes	50	Issuer of the device
status	String	Yes	10	Status
coding	Array			
code	String	Yes	10	Snomed code
display	String	Yes	100	Description of snomed code
manufacturer	String	Yes	100	Manufacturer
model	String	Yes	100	Model of the machine
version	String	Yes	100	Version of the machine
patient	Object			
display	String	Yes	50	Patient Details
reference	String	Yes	100	Reference of the patient
safety	Array			
coding	Array			
display	String	Yes	100	text for device

URL: https://sandbox.secureemrplus.com/prognocis/fhir/Device/?_id=581

Example Response JSON:

```
{
  "resourceType": "Bundle",
  "id": "ed676d7b-5c77-4165-8cde-1e2f08934db2",
  "meta": {
    "lastUpdated": "2017-08-10T16:56:58.410+05:30"
  },
  "type": "searchset",
  "total": 2,
  "link": [
    {
      "relation": "self",
      "url": "https://sandbox.secureemrplus.com/prognocis/fhir/Device/?_id=581"
    }
  ],
  "entry": [
    {
      "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Device/20",
      "resource": {
        "resourceType": "Device",
        "id": "20",
        "udi": {
          "deviceIdentifier": "00643169007222",
          "name": "cardiac pacemaker",
          "issuer": "GS1"
        },
        "status": "active",
        "type": {
          "coding": [
            {
              "display": "704707009-Cardiac resynchronization therapy implantable defibrillator (physical object)"
            }
          ]
        },
        "manufacturer": "MEDTRONIC, INC.",
        "model": "Viva™ Quad XT CRT-D",
        "version": "DTBA1QQ",
        "patient": {
          "reference": "Patient/581",
          "display": "Newman, Alice"
        },
        "safety": [
          {

```

```

      "coding": [
        {
          "display": "Labeling does not contain MRI Safety Information"
        }
      ]
    }
  ]
},
{
  "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Device/28",
  "resource": {
    "resourceType": "Device",
    "id": "28",
    "udi": {
      "deviceIdentifier": "00643169007222",
      "name": "cardiac pacemaker",
      "issuer": "GS1"
    },
    "status": "active",
    "type": {
      "coding": [
        {
          "code": "175135009",
          "display": "704707009-Cardiac resynchronization therapy implantable defibrillator
(physical object)"
        }
      ]
    },
    "manufacturer": "MEDTRONIC, INC.",
    "model": "Viva™ Quad XT CRT-D",
    "version": "DTBA1QQ",
    "patient": {
      "reference": "Patient/581",
      "display": "Newman, Alice"
    },
    "safety": [
      {
        "coding": [
          {
            "display": "Labeling does not contain MRI Safety Information"
          }
        ]
      }
    ]
  }
}

```

```
}  
]  
}
```

18. DEVICE INDIVIDUAL RESOURCE

Request Parameters

Param Name	Data Type	Mandatory	Length	Comments
PatientId	String	Yes	10	
deviceId	String	Yes	10	

Response Parameters

Param Name	Data Type	Always Available in Response	Length	Comments
resource	Object			
resourceType	String (Device)	Yes		
id	String	Yes	10	Id for the Device
udi	Object	Yes	30	
deviceIdIdentifier	String	Yes	50	deviceIdIdentifier of the device
name	String		100	Name of the Device
issuer	String	Yes	50	Issuer of the device
status	String	Yes	10	Status
coding	Array			
code	String	Yes	10	Snomed code
display	String	Yes	100	Description of snomed code
manufacturer	String	Yes	100	Manufacturer
model	String	Yes	100	Model of the machine
version	String	Yes	100	Version of the machine
patient	Object			
display	String	Yes	50	Patient Details
reference	String	Yes	100	Reference of the patient
safety	Array			
coding	Array			
display	String	Yes	100	text for device

URL: <https://sandbox.secureemrplus.com/prognocis/fhir/Device/20>

Example Response JSON:

```
{
  "resourceType": "Device",
  "id": "20",
  "udi": {
    "deviceIdentifier": "00643169007222",
    "name": "cardiac pacemaker",
    "issuer": "GS1"
  },
  "status": "active",
  "type": {
    "coding": [
      {
        "display": "704707009-Cardiac resynchronization therapy implantable defibrillator
(physical object)"
      }
    ]
  },
  "manufacturer": "MEDTRONIC, INC.",
  "model": "Viva™ Quad XT CRT-D",
  "version": "DTBA1QQ",
  "patient": {
    "reference": "Patient/581",
    "display": "Newman, Alice"
  },
  "safety": [
    {
      "coding": [
        {
          "display": "Labeling does not contain MRI Safety Information"
        }
      ]
    }
  ]
}
```

19. LABORATORY VALUE(S)/RESULT(S)

Request Parameters

Param Name	Data Type	Mandatory	Length	Comments
PatientId	String	Yes	10	
category	String (Value always result)	Yes	10	

Response Parameters

Param Name	Data Type	Always Available in Response	Length	Comments
resource	Object			
resourceType	String (Observation)	Yes	50	
id	String	Yes	10	Id for the Lab tests
status	String	Yes	30	Status of Observation
category	Array	Yes		
coding	Array	Yes		
code	String	Yes	10	
display	String	Yes	50	
code	Array	Conditional		If Loinc code present
coding	Array	Conditional		If Loinc code present
code	String	Conditional	30	If Loinc code present
display	String	Conditional	255	If Loinc code present
subject	String	Yes	50	Here Reference is Patient
valueString	String	Yes	255	Actual Value or Result of Vitals Sign

URL: https://sandbox.secureemrplus.com/prognocis/fhir/Observation/labObservation/?category=result&_id=581

Example Response JSON:

```
{
  "resourceType": "Bundle",
  "id": "ab13d534-b66b-488f-a410-2de0588f9c2f",
  "meta": {
    "lastUpdated": "2017-08-23T17:47:23.752+05:30"
  },
  "type": "searchset",
```

```
"total": 7,
"link": [
  {
    "relation": "self",
    "url": "https://sandbox.secureemrplus.com/prognocis/fhir/Observation/?
category=result&labId=581"
  }
],
"entry": [
  {
    "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Observation/987",
    "resource": {
      "resourceType": "Observation",
      "id": "987",
      "category": [
        {
          "coding": [
            {
              "code": "Laboratory",
              "display": "Lab"
            }
          ]
        }
      ],
      "code": {
        "coding": [
          {
            "code": "5778-6",
            "display": "Color of Urine"
          }
        ]
      },
      "valueString": "YELLOW"
    }
  },
  {
    "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Observation/988",
    "resource": {
      "resourceType": "Observation",
      "id": "988",
      "category": [
        {
          "coding": [
            {
              "code": "Laboratory",
              "display": "Lab"
            }
          ]
        }
      ]
    }
  }
]
```

```
    }
  ]
}
],
"code": {
  "coding": [
    {
      "code": "5767-9",
      "display": "Appearance of Urine"
    }
  ]
},
"valueString": "CLEAR"
}
},
{
  "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Observation/989",
  "resource": {
    "resourceType": "Observation",
    "id": "989",
    "category": [
      {
        "coding": [
          {
            "code": "Laboratory",
            "display": "Lab"
          }
        ]
      }
    ],
    "code": {
      "coding": [
        {
          "code": "5811-5",
          "display": "Specific gravity of Urine by Test strip"
        }
      ]
    },
    "valueString": "1.015",
    "referenceRange": [
      {
        "low": {
          "value": 1
        },
        "high": {
          "value": 1.03
        }
      }
    ]
  }
}
```

```
    }
  }
]
},
{
  "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Observation/990",
  "resource": {
    "resourceType": "Observation",
    "id": "990",
    "category": [
      {
        "coding": [
          {
            "code": "Laboratory",
            "display": "Lab"
          }
        ]
      }
    ],
    "code": {
      "coding": [
        {
          "code": "5803-2",
          "display": "pH of Urine by Test strip"
        }
      ]
    },
    "valueString": "5",
    "referenceRange": [
      {
        "low": {
          "value": 5
        },
        "high": {
          "value": 8
        }
      }
    ]
  }
},
{
  "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Observation/991",
  "resource": {
    "resourceType": "Observation",
    "id": "991",
```

```
"category": [
  {
    "coding": [
      {
        "code": "Laboratory",
        "display": "Lab"
      }
    ]
  }
],
"code": {
  "coding": [
    {
      "code": "5792-7",
      "display": "Glucose [Mass/volume] in urine by test strip"
    }
  ]
},
"valueString": "50"
},
{
  "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Observation/992",
  "resource": {
    "resourceType": "Observation",
    "id": "992",
    "category": [
      {
        "coding": [
          {
            "code": "Laboratory",
            "display": "Lab"
          }
        ]
      }
    ]
  },
  "code": {
    "coding": [
      {
        "code": "5797-6",
        "display": "Ketones [Mass/Volume] in urine by test strip"
      }
    ]
  },
  "valueString": "Negative"
}
```

```
    },
    {
      "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Observation/993",
      "resource": {
        "resourceType": "Observation",
        "id": "993",
        "category": [
          {
            "coding": [
              {
                "code": "Laboratory",
                "display": "Lab"
              }
            ]
          }
        ],
        "code": {
          "coding": [
            {
              "code": "5804-0",
              "display": "Protein [Mass/volume] in Urine by Test strip"
            }
          ]
        },
        "valueString": "100"
      }
    }
  ]
}
```

20. LABORATORY VALUE(S)/RESULT(S) INDIVIDUAL RESOURCE

Request Parameters

Param Name	Data Type	Mandatory	Length	Comments
PatientId	String	Yes	10	
labId	String	Yes	10	

Response Parameters

Param Name	Data Type	Always Available in Response	Length	Comments
resource	Object			
resourceType	String (Observation)	Yes	50	
Id	String	Yes	10	Id for the Lab tests
status	String	Yes	30	Status of Observation
category	Array	Yes		
coding	Array	Yes		
Code	String	Yes	10	
display	String	Yes	50	
Code	Array	Conditional		If Loinc code present
coding	Array	Conditional		If Loinc code present
Code	String	Conditional	30	If Loinc code present
display	String	Conditional	255	If Loinc code present
subject	String	Yes	50	Here Reference is Patient
valueString	String	Yes	255	Actual Value or Result of Vitals Sign

URL: <https://sandbox.secureemrplus.com/prognocis/fhir/Observation/result/993>

Example Response JSON:

```
{
  "resourceType": "Observation",
  "id": "993",
  "category": [
    {
      "coding": [

```



```
"code": "Laboratory",
"display": "Lab"
}
]
},
"code": {
"coding": [
{
"code": "5804-0",
"display": "Protein [Mass/volume] in Urine by Test strip"
}
]
},
"valueString": "100"
}
```

21. HEALTH CONCERN RESOURCE

Request Parameters

Param Name	Data Type	Mandatory	Length	Comments
PatientId	String	Yes	10	

Response Parameters

Param Name	Data Type	Always Available in Response	Length	Comments
resource	Object			
resourceType	String (Condition)	Yes		
id	String	Yes	10	Id for the Health Concern
status	String	Yes	30	Status of the Health Concern
verificationStatus	String	Yes	50	Status of verification
category	Array			
text	String	yes	50	Category of Health Concern
code				
coding	Array			
system	String	Yes	50	Snomed URL
code	String	Yes	10	Snomed code
display	String	Yes	30	Snomed Description
text	String	Yes		
subject	String	Yes	50	Here Reference is Patient
reference	Object			
onsetDateTime	Datetime	Yes		Date when concern was recorded

URL: https://sandbox.secureemrplus.com/prognocis/fhir/Condition/?_id=581&category=concerns

Example Response JSON:

```
{
  "resourceType": "Bundle",
  "id": "17a99242-f8f7-41e8-a4dc-84d7fd54a8e6",
  "meta": {
    "lastUpdated": "2017-08-10T17:04:44.250+05:30"
  },
  "type": "searchset",
  "total": 2,
  "link": [
```

```
{
  "relation": "self",
  "url": "https://sandbox.secureemrplus.com/prognocis/fhir/Condition/?_id=581"
},
"entry": [
  {
    "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Condition/27",
    "resource": {
      "resourceType": "Condition",
      "id": "27",
      "clinicalStatus": "active",
      "verificationStatus": "confirmed",
      "category": [
        {
          "text": "New Diagnosis"
        }
      ],
      "code": {
        "coding": [
          {
            "system": "http://snomed.info/sct",
            "code": "238131007",
            "display": "Watch Weight of patient"
          }
        ],
        "text": "Overweight"
      },
      "subject": {
        "reference": "Patient/581",
        "display": "Newman, Alice"
      },
      "onsetDateTime": "2017-08-10T17:04:44+05:30"
    }
  },
  {
    "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/Condition/26",
    "resource": {
      "resourceType": "Condition",
      "id": "26",
      "clinicalStatus": "active",
      "verificationStatus": "confirmed",
      "category": [
        {
          "text": "PHM"
        }
      ]
    }
  }
]
```

```

    ],
    "code": {
      "coding": [
        {
          "system": "http://snomed.info/sct",
          "code": "83986005",
          "display": "Documented HypoThyroidism problem"
        }
      ],
      "text": "Severe hypothyroidism"
    },
    "subject": {
      "reference": "Patient/581",
      "display": "Newman, Alice"
    },
    "onsetDateTime": "2017-08-10T17:04:44+05:30"
  }
}
]
}

```

PROBLEM

Request Parameters

Param Name	Data Type	Mandatory	Length	Comments
PatientId	String	Yes	10	
category	String (Value always problems)	Yes	10	

URL: https://sandbox.secureemrplus.com/prognocis/fhir/Condition/?_id=581&category=problems

Response Parameters

Param Name	Data Type	Always Available in Response	Length	Comments
resource	Object			
resourceType	String (Condition)	Yes		
id	String	Yes	10	Id for the Problem
status	String	Yes	30	Status of the Problem

verificationStatus	String	Yes	50	Status of verification
category	Array			
text	String	yes	50	Category of Problem
code				
coding	Array			
system	String	Yes	50	Snomed URL
code	String	Yes	10	Snomed code of Problem
display	String	Yes	30	Snomed Description of Problem
text	String	Yes		
subject	String	Yes	50	Here Reference is Patient
reference	Object			
onsetDateTime	Datetime	Yes		Date when concern was recorded
context	String	Yes	50	Encounter details
reference	Object			
display	String	Yes	50	Encounter details

Example Response JSON:

```
{
  "resourceType": "Condition",
  "id": "2243",
  "clinicalStatus": "active",
  "verificationStatus": "confirmed",
  "code": {
    "coding": [
      {
        "system": "http://snomed.info/sct",
        "code": "386661006",
        "display": "Fever"
      }
    ],
    "text": "Fever Unspecified"
  },
  "subject": {
    "reference": "Patient/581",
    "display": "Newman, Alice"
  },
  "context": {
    "reference": "Encounter/2012",
    "display": "Enc - 1"
  }
}
```

```

    },
    "onsetDateTime": "2015-06-22T00:00:00+05:30"
  }

```

Assessment

Request Parameters

Param Name	Data Type	Mandatory	Length	Comments
PatientId	String	Yes	10	

URL: https://sandbox.secureemrplus.com/prognocis/fhir/RiskAssessment/?_id=581

Response Parameters

Param Name	Data Type	Always Available in Response	Length	Comments
resource	Object			
resourceType	String (RiskAssessment)	Yes		
id	String	Yes	10	Id for the Problem
status	String	Yes	30	Status of the Problem
subject	String	Yes	50	Here Reference is Patient
reference	Object			
display	String	Yes	50	Patient Details
context	String	Yes	50	Encounter details
reference	Object			
display	String	Yes	50	Encounter details
occurrenceDateTime	Datetime	Yes		Date when concern was recorded
performer	Object			
display	String	Yes		Provider
reasonCodeableConcept	Object			
coding	Array			
code	String	Yes	10	Snomed of Assessment
display	String	Yes	50	Snomed Description

comment	String	Yes	100	Description of Assessment
---------	--------	-----	-----	---------------------------

Example Response JSON:

```
{
  "resourceType": "RiskAssessment",
  "id": "2012",
  "subject": {
    "reference": "Patient/581",
    "display": "Newman, Alice"
  },
  "context": {
    "reference": "Encounter/2012",
    "display": "Enc - 1"
  },
  "occurrenceDateTime": "2015-06-22T00:00:00+05:30",
  "performer": {
    "display": "Albert Davis"
  },
  "reasonCodeableConcept": {
    "coding": [
      {
        "code": "386661006",
        "display": "Fever"
      }
    ]
  },
  "comment": "The patient was found to have fever and Dr Davis is suspecting Anemia based on the patient history. So Dr Davis asked the patient to closely monitor the temperature and blood pressure and get admitted to Community Health Hospitals if the fever does not subside within a day."
}
```

Plan Of Treatment

Request Parameters

Param Name	Data Type	Mandatory	Length	Comments
PatientId	String	Yes	10	

URL: https://sandbox.secureemrplus.com/prognocis/fhir/CarePlan/?_id=581

Response Parameters

Param Name	Data Type	Always Available in Response	Length	Comments
resource	Object			
resourceType	String (Care-Plan)	Yes	50	
id	String	Yes	10	Id
description	String	Yes	100	Description
Subject	Object	Yes		
display	String	Yes	50	Patient Details
reference	String	Yes	100	Reference of the patient
context	String	Yes	50	Encounter details
reference	Object			
display	String	Yes	50	Encounter details
period	Object			
start	String	Yes	20	Start date
note	Object			
text	String	Yes	100	Text for Plan

Example Response JSON:

```
{
  "resourceType": "Bundle",
  "id": "a5fb4574-168b-49eb-b562-74b791351934",
  "meta": {
    "lastUpdated": "2017-08-23T17:39:06.305+05:30"
  },
  "type": "searchset",
  "total": 3,
  "link": [
    {
      "relation": "self",
      "url": "https://sandbox.secureemrplus.com/prognocis/fhir/CarePlan/?_id=581"
    }
  ],
  "entry": [
    {
      "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/CarePlan/1",
      "resource": {
        "resourceType": "CarePlan",
        "id": "1",
        "description": "EKG",

```



```
"subject": {
  "reference": "Patient/581",
  "display": "Newman, Alice"
},
"context": {
  "reference": "Encounter/2012",
  "display": "Enc - 1"
},
"period": {
  "start": "2015-06-23T00:00:00+05:30"
},
"note": [
  {
    "text": "Get an EKG done on 6/23/2015"
  }
]
},
{
  "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/CarePlan/2",
  "resource": {
    "resourceType": "CarePlan",
    "id": "2",
    "description": "Urinalysis macro (dipstick) panel",
    "subject": {
      "reference": "Patient/581",
      "display": "Newman, Alice"
    },
    "context": {
      "reference": "Encounter/2012",
      "display": "Enc - 1"
    },
    "period": {
      "start": "2015-06-29T00:00:00+05:30"
    }
  }
},
{
  "fullUrl": "https://sandbox.secureemrplus.com/prognocis/fhir/CarePlan/3",
  "resource": {
    "resourceType": "CarePlan",
    "id": "3",
    "description": "clindamycin HCl 300 mg oral capsule",
    "subject": {
      "reference": "Patient/581",
      "display": "Newman, Alice"
    }
  }
}
```

```
    },
    "context": {
      "reference": "Encounter/2012",
      "display": "Enc - 1"
    },
    "period": {
      "start": "2015-06-27T00:00:00+05:30"
    },
    "note": [
      {
        "text": "Take Clindamycin 300mg three times a day as needed if pain does not
subside"
      }
    ]
  }
}
```

22. EXCEPTIONS AND RETURN CODES

Errors	Status Code
ERRINDEX_INVALID_ARGS	0
ERRINDEX_INVALID_USER	1
ERRINDEX_INVALID_PASS	2
ERRINDEX_ERR_WHILE_PROCESS	3
SC_FORBIDDEN	403
SC_OK	200
SC_BAD_REQUEST	400
SC_NOT_ACCEPTABLE	406
SC_UNAUTHORIZED	401

23. SOFTWARE REQUIREMENT

There is no software requirement for implementation of API.

.