

# PediatricXpress Application Programming Interface (API)

Patient Data Request v20

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## INTRODUCTION

#### Overview:

In the 2015 Edition of Health IT Certification Criteria, ONC established criteria §170.315(g)(7), §170.315(g)(8), and §170.315(g)(9) which requires a certified health IT to demonstrate the ability to provide patient-facing application access to the Common Clinical Data Set via an Application Programming Interface. Application Programming Interface (API) refers to technology which allows one software program to access the services provided by another software program.

## TERMS OF USE

Physician Xpress, Inc. offers some of its data in machine readable format through an Application Programming Interface (API) associated with the PediatricXpress System. This service is offered subject to your acceptance of the terms and conditions (Agreement) contained herein.

#### Scope:

All of the content, documentation, code, and related materials made available to you through the API are subject to these terms. Access to use the API or its content constitutes acceptance of this Agreement.

#### Use

You may use any of the Physician Xpress, Inc. API's to develop a service or services to search, display, analyze, retrieve, view, and otherwise "get" information from Physician Xpress, Inc.

#### Attribution

You may use the Physician Xpress, Inc. name in order to identify the source of the API content, and are subject to these rules. You shall not use the names of the Physician Xpress, Inc. to imply endorsement, approval, sponsorship, association, or authorization of any product, service, or entity (not-for-profit, commercial, or otherwise).

#### Modification or False Representation of Content

You may not modify any content accessed through the API in any manner which could reasonably be interpreted or construed as conveying the false impression that Physician Xpress, Inc. is the source of such content.

#### Right to Limit

Your use of the API may be subject to certain limitations on access, calls, or use as set forth within this Agreement or otherwise provided by Physician Xpress, Inc. If Physician Xpress, Inc. reasonably believes that you have attempted to exceed or circumvent these limits, your ability to use the API may be permanently or temporarily blocked. Physician Xpress, Inc. may monitor your use of the API to improve the service or to ensure compliance with this Agreement.

#### **Service Termination**

If you wish to terminate this Agreement, you may do so by refraining from further use of the API. Physician Xpress, Inc. reserves the right to discontinue providing the API or data to an entity if there are concerns related to privacy of data, security, harm, or infeasible. Additionally, if an entity causes performance problems in the API or related interfaces, Physician Xpress, In. reserves the right to

discontinue providing service to this entity. Privacy and Security are important to Physician Xpress, Inc. and their clients and Physician Xpress, Inc. may stop providing the API to you if, in our opinion, your use violates any Physician Xpress, Inc. policy related to policy and/or security. See our Privacy and Legal Notices and Website Terms and Conditions. You agree that you are using this API "as is" and at your own risk. All provisions of this Agreement which by their nature should survive termination shall survive termination including, without limitation, warranty disclaimers, indemnity, and limitations of liability.

#### Changes

Physician Xpress, Inc. reserves the right, at its sole discretion, to modify or replace this Agreement, in whole or in part. Your continued use of or access to the API following posting of any changes to this Agreement constitutes acceptance of those modified terms. Physician Xpress, Inc. may, in the future, offer new services and/or features through the API. Such new features and/or services shall be subject to the terms and conditions of this Agreement. Physician Xpress, Inc. may change any aspect of the API or the data offered at any time for any reason.

#### Disclaimer of Warranties

The API and all data provided through the API is provided "as is" and on an "as-available" basis. All express or implied conditions, representations, and warranties, including without limitation the warranties of merchantability, fitness for a particular purpose, and non-infringement are hereby disclaimed. Physician Xpress, Inc. makes no warranty that the API data will be error-free or that access thereto will be continuous or uninterrupted.

#### Limitations on Liability

In no event will Physician Xpress, Inc., or its officers, employees, contractors, or agents be liable for any lost revenue, profit, or data, or for special, indirect, consequential, incidental, or punitive damages, however caused and regardless of theory of liability arising out of the use or inability to use the API or data offered through the API, even if Physician Xpress, Inc. has been advised of the possibility of such damages. The foregoing limitations shall apply even if the above stated warranty disclaimer fails to its essential purpose.

#### **General Representations**

You hereby warrant that:

- (1) Your use of the API will be in strict accordance with the Physician Xpress, Inc. Privacy Policy, this Agreement, and all applicable laws and regulations; and
- (2) Your use of the API will not infringe or misappropriate the intellectual property rights of any third party.

#### **Indemnification**

You agree to indemnify and hold harmless the Physician Xpress, Inc., its officers, employees, contractors, agents, and the like from and against any and all liabilities, claims, and expenditures, including attorney's fees, arising out of your use of the API, including but not limited to violation of this Agreement.

#### Miscellaneous

This Agreement constitutes the entire Agreement between Physician Xpress, Inc. and you concerning the subject matter hereof, and may be modified only by the posting of a revised version on this page by Physician Xpress, Inc.

#### <u>Disputes</u>

Any disputes arising out of this Agreement and access to or use of the API shall be governed by the laws of the State of Pennsylvania and be conducted in Montgomery County, PA.

## No Waiver of Rights

Physician Xpress, Inc.'s failure to exercise or enforce any right or provision of this Agreement shall not constitute waiver of such right or provision.

## **REGISTRATION**

Physician Xpress, Inc. uses OAuth2 tokens for Authentication to its API. To Authentication you will need 2 elements:

- A Username
- A Password

A Username and Password are provided by Physician Xpress, Inc. to register. Each application that wishes to have access to our data will have to request the Username and Password by calling Physician Xpress, Inc.

## **AUTHENTICATION**

USING JQUERY: To Request an OAuth2 token, the user will have to send a post request outlined in the example below:

```
$.ajax({
type: 'POST',
url: 'token',
dataType: 'application/x-www-form-urlencoded',
'&username=' + [Username] +
'&password=' + [Password]
});
The response will be in the following format:
{
"access_token": "[Bearer Token]",
"token_type": "bearer",
"expires_in": [Expiration in seconds],
".issued": "[Issued Date]",
".expires": "[Expiration Date]"
}
```

Note. The first time the request is made from a client for a particular user, the authentication will fail. The user will have to activate the new authentication through a link sent by email.

Once the authentication info is received, the 'Bearer Token' will have to be included in all future requests through the Authorization header. Fill the authorization header as follows:

```
$.ajax({
type: 'GET',
url: 'patients'
headers: { 'Authorization': 'Bearer ' + [Bearer Token] }
);
```

## PATIENT SEARCH

## **REQUEST**

```
URL: /gapi/patients.php

Query Parameters:
    firstname (string : optional): Patient First Name
    lastName (string : optional): Patient Last Name
    sex (string : optional): Patient Gender ('M' for Male, 'F' for Female, 'U' for Unknown)
    dateOfBirth (date-time : optional): Patient Date of Birth (MM/DD/YYYY)

Additional Headers:
    Authorization: See Authentication
```

#### **RESPONSE**

```
Type: application/json
{
       "PatientId": "string",
       "FirstName": "string",
       "LastName": "string",
       "Prefix": "string",
       "Suffix": "string",
       "Nickname": "string",
       "Gender": "string",
       "DOB": "date-time",
       "Race": "string",
       "Race HL7 Code": "string",
       "Ethnicity": "string,
       "Ethnicity_HL7_Code": "string,
       "PreferredLanguage": "string",
       "SmokingStatus": "string",
       "Smoking_Snomed_Cd": "string",
}
1
```

#### Exceptions:

400 - Bad Request: Invalid Search Elements 401 - Unauthorized: Invalid token, or unauthorized record.

## **DATA REQUEST**

## **Allergy**

## **REQUEST**

```
URL: /gapi/allergies.php

Query Parameters:
    id (string: mandatory)
    from_Date (date-time : optional): (YYYY-MM-DD)
    to_Date (date-time : optional): (YYYY-MM-DD)

Additional Headers:
```

Authorization: See Authentication

#### **RESPONSE**

```
Type: application/json
       "PatientId": "string",
       "Category": "string",
       "Description": "string",
       "Reaction": "string",
       "Active": "string",
       "ResolutionDate": "Date",
       "EntryDate": "Date",
       "DateNoted": "Date",
       "RcopiaID": "string",
       "NDCID": "string",
       "RXNORMID": "string",
       "RXNORMIDTYPE": "string",
       "Severity": "string"
},
...
1
```

Exceptions:

#### **Assessments**

## **REQUEST**

```
URL: /gapi/assessments.php

Query Parameters:
    id (string: mandatory)
    from_Date (date-time : optional): (YYYY-MM-DD)
    to_Date (date-time : optional): (YYYY-MM-DD)

Additional Headers:
Authorization: See Authentication

RESPONSE

Type: application/json
```

"Begin Date": "Date",
"End Date": "Date",
"Assessment": "string"
},
...

"PatientId": "string",

Exceptions:

{

1

#### **Care Team Members**

## **REQUEST**

```
URL: /gapi/careteammembers.php

Query Parameters:
    id (string: mandatory)
    from_Date (date-time : optional): (YYYY-MM-DD)
    to_Date (date-time : optional): (YYYY-MM-DD)

Additional Headers:
Authorization: See Authentication
```

#### **RESPONSE**

#### Exceptions:

## **Functional Status**

## **REQUEST**

```
URL: /gapi/functionalstatus.php
Query Parameters:
      id (string: mandatory)
      from_Date (date-time : optional): (YYYY-MM-DD)
      to_Date (date-time : optional): (YYYY-MM-DD)
Additional Headers:
```

Authorization: See Authentication

#### **RESPONSE**

```
Type: application/json
{
           "PatientId": "string",
           "Begin Date": "Date",
           "End Date": "Date",
           "Functional Status": "string",
           "Snomed code": "string",
           "Status": "string",
},
1
```

#### Exceptions:

## Goals

## **REQUEST**

"Begin Date": "Date",
"End Date": "Date",
"Goal": "string",
"Value": "string"

Exceptions:

}, ... ]

## **Health Concerns**

## **REQUEST**

```
URL: /gapi/healthconcerns.php

Query Parameters:
    id (string: mandatory)
    from_Date (date-time : optional): (YYYY-MM-DD)
    to_Date (date-time : optional): (YYYY-MM-DD)

Additional Headers:
Authorization: See Authentication
```

#### **RESPONSE**

Exceptions:

#### **Immunizations**

## **REQUEST**

```
URL: /gapi/immunizations.php

Query Parameters:
    id (string: mandatory)
    from_Date (date-time : optional): (YYYY-MM-DD)
    to_Date (date-time : optional): (YYYY-MM-DD)

Additional Headers:
Authorization: See Authentication

RESPONSE

Type: application/json
[
{
        "PatientId": "string",
        "DateAdministered": "Date",
        "Route": "string",
        "Site": "string",
```

"CVX": "string",

"VaccineID": "string",
"LotNumber": "string",
"AdministeredBy": string,
"Company": "string",
"ExpirationDate": "Date"

Exceptions:

}, ... ]

## **Implantable Devices**

## **REQUEST**

```
URL: /gapi/implantabledevices.php
Query Parameters:
       id (string: mandatory)
       from_Date (date-time : optional): (YYYY-MM-DD)
       to_Date (date-time : optional): (YYYY-MM-DD)
Additional Headers:
Authorization: See Authentication
RESPONSE
Type: application/json
{
              "PatientId": "string",
              "Device_Identifier": "string",
              "Lot_Or_Batch": "string",
              "Serial_Number": "string",
              "Expiration_Date": "Date",
              "Manufacture_Date": "Date",
              "HCT_Identification_Code": "string",
              "GMDNPT_Name": "string",
              "SNOMED_CD": "string",
              "Brand_Name": "string",
              "Version_Or_Model": "string",
              "Company_Name": "string",
              "MRI_Safety": "string",
              "Latex": "string"
},
...
1
```

#### Exceptions:

#### **Lab Results**

## **REQUEST**

```
URL: /gapi/labresults.php

Query Parameters:
    id (string: mandatory)
    from_Date (date-time : optional): (YYYY-MM-DD)
    to_Date (date-time : optional): (YYYY-MM-DD)

Additional Headers:
Authorization: See Authentication
```

#### **RESPONSE**

Exceptions:

## **Lab Tests**

## **REQUEST**

```
URL: /gapi/labtests.php

Query Parameters:
    id (string: mandatory)
    from_Date (date-time : optional): (YYYY-MM-DD)
    to_Date (date-time : optional): (YYYY-MM-DD)

Additional Headers:
Authorization: See Authentication

RESPONSE

Type: application/json
[
{
        "PatientId": "string",
        "Order_Number": "string",
```

"Sent": "string",
"Date": "Date",

"docName": " string",
"TestDescription": "string",

"TestCode": "string",
"LabCompany": "string"

Exceptions:

}, ... ]

#### **Medications**

## **REQUEST**

```
URL: /gapi/medications.php
Query Parameters:
       id (string: mandatory)
       from_Date (date-time : optional): (YYYY-MM-DD)
       to_Date (date-time : optional): (YYYY-MM-DD)
Additional Headers:
Authorization: See Authentication
RESPONSE
Type: application/json
{
              "PatientId": "string",
              "BeginDate": "Date",
              "EndDate": "Date",
              "PrescribedDate": "Date",
              "DrugName": "string",
              "NDC": "string",
              "Form": "string",
              "Route": "string",
              "Strength": "string",
              "StrengthUnit": "string",
              "Quantity": "string",
              "QuantityQualifier": "string",
              "Dosage": "string",
              "Refills": "string",
              "Note": "string",
              "RXNORMID": "string"
},
]
```

Exceptions:

## **Mental Status**

## **REQUEST**

```
URL: /gapi/mentalstatus.php

Query Parameters:
    id (string: mandatory)
    from_Date (date-time : optional): (YYYY-MM-DD)
    to_Date (date-time : optional): (YYYY-MM-DD)

Additional Headers:
Authorization: See Authentication
```

#### **RESPONSE**

```
Type: application/json
[
{
          "PatientId": "string",
          "Begin Date": "Date",
          "End Date": "Date",
          "Mental Status": "string",
          "Snomed code": "string",
          "Status": "string",
},
...
},
...
]
```

#### Exceptions:

## **Patient CCDA**

## **REQUEST**

URL: /gapi/ccda.php

Query Parameters:

id (string: mandatory)

Additional Headers:

Authorization: See Authentication

## **RESPONSE**

Type: application/xml

Exceptions:

## **Problems**

## **REQUEST**

```
URL: /gapi/problems.php
Query Parameters:
      id (string: mandatory)
       from_Date (date-time : optional): (YYYY-MM-DD)
      to_Date (date-time : optional): (YYYY-MM-DD)
Additional Headers:
Authorization: See Authentication
RESPONSE
Type: application/json
              "PatientId": "string",
             "Resolution Date": "Date",
```

"Start Date": "Date", "CODE": "string", "Status": "string", "Description": "string"

### Exceptions:

}, ... ]

## **Procedures**

## **REQUEST**

```
URL: /gapi/procedures.php

Query Parameters:
    id (string: mandatory)
    from_Date (date-time : optional): (YYYY-MM-DD)
    to_Date (date-time : optional): (YYYY-MM-DD)

Additional Headers:
Authorization: See Authentication

RESPONSE

Type: application/json
[
{
        "PatientId": "string",
        "CPT_Code": "string",
        "Date": "Date",
        "Result": "string",
```

"Flag": "string",

"Affected\_DX": "string",
"Affected\_CPT": "string",
"LastName": "string",
"FirstName": "string"

#### Exceptions:

}, ... ]

#### **Treatment Plan**

## **REQUEST**

```
URL: /gapi/treatmentplan.php

Query Parameters:
    id (string: mandatory)
    from_Date (date-time : optional): (YYYY-MM-DD)
    to_Date (date-time : optional): (YYYY-MM-DD)

Additional Headers:
```

#### **RESPONSE**

Authorization: See Authentication

#### Exceptions:

#### **Vitals**

## **REQUEST**

URL: /gapi/vitals.php

```
Query Parameters:
       id (string: mandatory)
       from_Date (date-time : optional): (YYYY-MM-DD)
       to_Date (date-time : optional): (YYYY-MM-DD)
Additional Headers:
Authorization: See Authentication
RESPONSE
Type: application/json
{
              "PatientId": "string",
              "Height": "string",
              "Height_Units": "string",
              "Weight": "string",
              "Weight_Units": "string",
              "Head_Circ": "string",
              "Head_Circ_Units": "string",
              "Resp_Rate": "string",
              "Heart_Rate": "string",
              "Blood_Pressure": "string",
              "Temperature": "string",
              "Temperature_Units": "string",
              "Temperature_Type": "string",
              "Pulseox": "string",
              "Date Time": "Date-Time"
},
...
]
```

Exceptions: