![MDGuidelines® | The measure of health]

MDGuidelines® API: Formulary v3

Specification 1.2

Date: December 6, 2023

1 Overview

1.1 Purpose and Intended Audience

The purpose of this document is to provide detailed descriptions and specifications for the Formulary v3 API for MDGuidelines clients.

The Formulary API is intended to be used by MDGuidelines Customers and Partners that have integrated MDGuidelines into their own products who want to find Formulary detail records by Formulary ID.

The Formulary API is part of the MDGuidelines API product offering.

The version number of this document refers to the Specification version. See Section 2.3 Version Information below for information related to the API version.

1.2 Description

The Formulary v3 API returns Formulary detail data for the provided Formulary ID. Valid Formulary ID values should first be obtained using the Formulary Search API.

Formulary v3 reflects changes made to align element structure and naming to the MDGuidelines website. See Document Revision History for details.

Terminology

Term	Definition
Formulary	Refers to the Formulary tool and data. Based on the American College of Occupational and Environment Medicine (ACOEM), the tool provides detailed support and guidance based on evidence reviews for or against the use of a given drug therapy for the given condition. Formulary data is associated to medical codes.

2 API Specification

This section documents the technical usage of the Formulary API. General information about any of the MDGuidelines APIs can be found at https://api.mdguidelines.com/help.

MDGuidelines APIs are RESTful.

Responses may be formatted as XML or JSON (see Section 2.4 Input Parameters, below).

2.1 Endpoint

The Formulary API endpoint is: https://api.mdguidelines.com/api/v3/formulary/999, where 999 represents the Formulary ID obtained from the Formulary Search API.

Example: https://api.mdguidelines.com/api/v3/formulary/613

2.2 Authentication

The Organization's API license key must be provided via the request headers as "RG-LICENSE-KEY". This key will be provided by the Customer's Account Executive at MDGuidelines.

2.3 Version Information

The current version of this API is v3. Old versions are no longer supported, effective February 17, 2024.

2.4 Parameters

There are no parameters for this end point. The detail record is retrieved by adding the Formulary ID to the end point URI. See 2.1 Endpoint, above.

2.5 Response

Data can be returned as JSON or XML.

If using XML, the XSD may be found here: https://api.mdguidelines.com/xsd/FormularyV3.xsd

Data Element	Data Type	Req?	Data Element Description
FormularyId	Short	Yes	Unique identifier for a given Formulary record.
Phase	String	Yes	Phase of Treatment that the Formulary applies to. Possible values: Acute Chronic
Condition	String	Yes	The name of the condition that the Formulary record applies to. Conditions may be represented by multiple medical codes.
Category	String	Yes	A categorization of Conditions. Category corresponds to the ACOEM Disorder Chapter name.
RecommendationFlag	String	Yes	A grouping of Evidence Support values that will allow broader filtering of results without regard for strength of evidence. Possible values: Yes No None For more information, see Evidence Support below.
EvidenceStrength	String	Yes	A combination of ACOEM Strength of Evidence levels and "Other" recommendations provided by the MDGuidelines pharmacy benefit management partner, HealtheSystems. For more information and a list of possible values, see Evidence Support below.
EvidenceSortOrder	Short	Yes	A sort order which allows sorting by Evidence Strength. For more information, see Evidence Support below.
DrugName	String	Yes	A combined field representing the generic drug name and the associated common brand names. The generic name is first, in all-caps. The brand names are second, within parentheses in proper case. Brand names may special characters, such as the registered trademark character.
DrugClass	String	No	Class of medication for the Drug. For a list of possible classes, see Drug Classes below.
AverageEstimatedCost	Money	No	Average Estimated Cost of the drug, to be used for relative comparisons between drug options.

Data Element	Data Type	Req?	Data Element Description
Reference	String	No	References supporting the recommendation. May include internal references links (e.g. https://app.mdguidelines.com/Resources/ACOEM-Practice-Guidelines/Disorders, external reference links, or non-linked citations. All URL references will be full URLs. Multiple references for a given recommendation will be pipe-delimited ('|').
Icd9	String	No	A list of associated ICD-9-CM medical codes, comma-delimited.
Icd10	String	No	A list of associated ICD-10-CM medical codes, comma-delimited.
Pain	String	No	The pain classification, which includes descriptors of pain to provide further guidance on the selection of medication for the particular condition being treated. Note that this field may be used to distinguish unique records that have the same values for: Phase, Condition, Drug Class, and Drug Name. Examples (not limited to): Acute Neuropathic Post- operative Radicular Severe
CommentsForPrescriber	String	No	Comments to guide the clinician when prescribing. Multiple comments for a given recommendation will be pipe-delimited ('|').
CommentsForClaimsProfessional	String	No	Comments to guide the claims professional. Multiple comments for a given recommendation will be pipe-delimited ('|').

2.6 Reference Tables

The following reference table listings are provided as a convenience. The values in each list may change in the future. Future changes will be documented in an updated specification, published as a new version to the specification document. Updates of this type of data will not require a new endpoint version.

Drug Classes

DrugClass
ALTERNATIVE MEDICINES
ANALGESICS - ANTI-INFLAMMATORY
ANALGESICS - NonNarcotic
ANALGESICS - OPIOID
ANTI-INFECTIVE AGENTS - MISC.

DrugClass
ANTIANGINAL AGENTS
ANTIANXIETY AGENTS
ANTIARRHYTHMICS
ANTIASTHMATIC AND BRONCHODILATOR AGENTS
ANTICOAGULANTS
ANTICONVULSANTS
ANTIDEPRESSANTS
ANTIDIABETICS
ANTIHYPERTENSIVES
ANTIPARKINSON AGENTS
ANTISEPTICS & DISINFECTANTS
ASSORTED CLASSES
CALCIUM CHANNEL BLOCKERS
CEPHALOSPORINS
CHEMICALS
CORTICOSTEROIDS
COUGH/COLD/ALLERGY
DERMATOLOGICALS
DIURETICS
ENDOCRINE AND METABOLIC AGENTS - MISC.
FLUOROQUINOLONES
GASTROINTESTINAL AGENTS - MISC.
GENERAL ANESTHETICS
GENITOURINARY AGENTS - MISCELLANEOUS
GOUT AGENTS
HEMATOPOIETIC AGENTS
LOCAL ANESTHETICS-Parenteral
MACROLIDES
MINERALS & ELECTROLYTES
MUSCULOSKELETAL THERAPY AGENTS
NEUROMUSCULAR AGENTS
NUTRIENTS
OPHTHALMIC AGENTS
PENICILLINS
PSYCHOTHERAPEUTIC AND NEUROLOGICAL AGENTS - MISC.
TETRACYCLINES
TOXOIDS
ULCER DRUGS
VITAMINS

Evidence Support

The Sort Order below is not provided in the API. For more information about Evidence Support, read more about Strength of Evidence in our Formulary Help Page (requires website login).

EvidenceSupport	EvidenceSortOrder
Yes, Strong Evidence (A)	1
Yes, Moderate Evidence (B)	2

Evidence Support	EvidenceSortOrder
Yes, Limited Evidence (C)	3
Yes, Insufficient Evidence (I)	4
No, Strong Evidence (A)	5
No, Moderate Evidence (B)	6
No, Limited Evidence (C)	7
No, Insufficient Evidence (I)	8
No Recommendation	12
Yes, Other	13
No, Other	14

2.7 Exception Conditions and Troubleshooting

The service may provide response codes, for success or errors. The common response codes implemented in the MDGuidelines API are documented at https://api.mdguidelines.com/help.

Response Status Codes

Status Code	Cause(s)
401	Message: • License code not authorized. This response will be returned in the following scenarios: • License key is expired • License key is missing • License key is otherwise invalid
404	Message: • Formulary ID was not found. This response will be returned in the following scenarios: • No records exist for the requested FormularyID.
406	Message: • Formulary ID is required and must be an integer This response will be returned in the following scenarios: • No formulary ID is provided in the URI. • A non-integer value is provided as the FormularyID.
500	Server error. • If the server, API site, or this service failed, the response will be a 500 Server error.

2.8 Testing

MDGuidelines offers a test harness for integration testing:

https://api.mdguidelines.com/help/formulary-v3.html

Note: use of the test harness requires production license key configuration (RG-LICENSE-KEY)

2.9 Sample Code

JQuery

```
var uri = "https://api.mdguidelines.com/api/v3/formulary/";
 uri += "1";

$.ajax({
  url: uri,
  type: 'GET',
  dataType: 'json',
  headers: { 'RG-LICENSE-KEY': 'XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX',
},
  success: function (data) { handleData(data) },
  error: function (xhr, status, error) { handleError(xhr, status,
error) }
})
```

Document Revision History

Date	Reason For Changes	Document Version

05/08/2017	Initial Version of Specification
	
	Changes between v2 and v3 of the API end point:
	
	* General structure and element naming changes to match the presentation of the MDGuidelines website. Specifically:
	
	  * Remove elements: ConditionID
	
	  * Rename elements: ConditionPhase -> Phase; ConditionName -> Condition; DrugPrice -> AverageEstimatedCost
		1.0

10/15/2017	Fixed typographical error.	1.1
12/6/2023	Formulary content update: • References data page numbers replaced by URL citations where applicable. Multiple references will be pipe-delimited. See Section 2.5. Clarifications: • Sample JQUERY added. See Section 2.9. • Comments for Claims Professionals and Comments for Prescribers are also pipe- delimited, where necessary. See Section 2.5. • Added clarification that reference table data is subject to change (although it has not changed in this documentation update). (See Section 2.6)	1.2