CAT-MH™ API

Computerized Adaptive Testing - Mental Health

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CAT-MH™ API

Overview

The Computerized Adaptive Testing-Mental Health (CAT-MH™) suite of web applications provides the tools needed to create, administer and review the results of mental health tests for a specific individual (i.e., a subject). An interview is comprised of one or more tests for the assessment of major depressive disorder, depression, anxiety, mania/hypomania or suicidality in one particular subject. While an interview was designed to be administered in one sitting, it can be interrupted and later resumed, if necessary. More than one interview can be created for a particular subject, allowing for the longitudinal testing and monitoring of that subject's mental health over a period of time.

The CAT-MH™ Application Program Interface (API) is a set of web services that facilitate the communication between the CAT-MH™ web applications and any client application capable of sending requests via the HTTP protocol and processing JSON data. These web services provide ways to create one or more interviews for a specified subject and to administer a particular interview.

Interviews

Creating an Interview

An interview is comprised of one or more tests for the assessment of Major Depressive Disorder (mdd), Depression (dep), Anxiety (anx), Mania/Hypomania (m/hm), Substance Use Disorder (sud), C-SSRS Suicide Screen (c-ssrs) or Suicide Scale (ss) for a specified subject. You can create one or more interviews for that subject by sending a single request to the **createInterview** web service.

To create an interview, send a **POST** HTTP request to:

https://www.cat-mh.com/portal/secure/interview/createInterview

Request Headers

Header	Value	Description
applicationid	<To be provided>	The encoded ID of the application (client)

Request Body
The request body should be a JSON object with the following properties:

Property	Type	Value	Description
organizationID	number	<To be provided>	The registered organization ID
userFirstName	string	"Automated"	The first name of the registered user authorized to create interviews via the CAT-MH™ API.

Property	Type	Value	Description
userLastName	string	"Creation"	The last name of the registered user authorized to create interviews via the CAT-MH™ API.
subjectID	string		The unique ID for a subject (up to 32 characters). *NOTE: Only alphanumeric, dash and underscore characters are allowed.* A new subject will be created if the subject ID provided in the request is not already in the CAT-MH™ system.
numberOfInterviews	number		The number of interviews to be created at this time. Multiple interviews can be created for the same subject in advance.
language	number		• 1 for English • 2 for Spanish • 3 for Chinese - simplified • 4 for Chinese - traditional
timeframeID (Optional)	number		See the Timeframes table on page 4. If not specified, default value is 4.
tests	array		A list of JSON objects, each object representing a particular test in the interview (see below).
condTestFlags (Optional)	array		An array of numbers that can include any of the following flags: • 1 if the Depression test should be administered only if the result of the MDD test is Positive; both **mdd** and **dep** must be included in the tests array. • 2 if the Post-Traumatic Stress Disorder test should be administered only if the result of the PTSD-DX test is Positive; both **ptsd-dx** and **ptsd** must be included in the tests array. • 3 if the PTSD-Expanded test should be administered only if the result of the PTSD-DX test is Positive; both **ptsd-dx** and **ptsd-e** must be included in the tests array.

Property	Type		Description
complEmailFlag* (Optional)	number		• 0 if an email should not be sent upon interview completion (default if not specified). • 1 if a completion email should be sent to the interview creator. • 2 if the completion email should include a summary of test results.

NOTE: The Automated Creation user account does not usually have an email address associated with it and thus cannot receive emails.

The JSON object that represents a test has the following properties:

Property	Type	Description
type	string	For a list of currently available test types, refer to the Test Type column in the table below.
timeframeID (Optional)	number	See the Timeframes table on page 4. If not specified, its value is set to the interview timeframeID.

Currently available test types

Test Type	Name	Available Languages*	Valid Timeframes
mdd	Major Depressive Disorder	1,2,3,4	All
dep	Depression	1,2,3,4	All
anx	Anxiety Disorder	1,2,3,4	All
m/hm	Mania/Hypomania	1,2,3,4	3†,4,5,6,7
sud sa (deprecated)	Substance Use Disorder (formerly Substance Abuse)	1,2,3,4	5†,6,7
ptsd-dx	PTSD-Diagnosis	1,2,3,4	All
ptsd	Post-Traumatic Stress Disorder (available, but superseded by ptsd-e)	1,2,3,4	All
ptsd-e	PTSD-Expanded	1,2,3,4	All
psy-c	Psychosis - Clinician	1,2,3,4	All
psy-s	Psychosis - Self-Report	1,2,3,4	All
a/adhd	Adult ADHD	1,2,3,4	All
sdoh	Social Determinants of Health	1,2,3,4	All
c-ssrs	C-SSRS Suicide Screen	1,2,3,4	All

Test Type	Name	Available Languages*	Valid Timeframes
ss	Suicide Scale	1,2,3,4	All
p-dep	Depression (Perinatal)	1,2,3,4	All
p-anx	Anxiety Disorder (Perinatal)	1,2,3,4	All
p-m/hm	Mania/Hypomania (Perinatal)	1,2,3,4	3†,4,5,6,7
cj-dep	Depression (Crim. Justice)	1,2,3,4	All
cj-anx	Anxiety Disorder (Crim. Justice)	1,2,3,4	All
cj-m/hm	Mania/Hypomania (Crim. Justice)	1,2,3,4	3†,4,5,6,7
cj-sud	Substance Use Disorder (CJ)	1,2,3,4	5†,6,7
cj-ss	Suicide Scale (Crim. Justice)	1,2,3,4	All

*NOTE: If specifying a test that is not available for the requested language, that test will be excluded when creating the interview.

†NOTE: If the interview timeframe is not valid for a certain test type, the closest valid timeframe will be used for that test: 3 for m/hm, p-m/hm or cj-m/hm, and 5 for sud or cj-sud.

NOTE: If specifying a test designed for a specific population (i.e., Perinatal or Criminal Justice), all tests in an interview should target that specific population unless a test of that type is not available for that population. In that case a test for the General population may be specified.
For example, an interview can include **mdd, p-dep**, and **p-anx**, but should not include **mdd, dep** and **p-anx**, because the Depression test should also target the Perinatal population for consistency with the Anxiety Disorder (Perinatal) test. Similarly, **mdd, cj-dep**, and **p-anx** should not be included in the same interview because they target two different specific populations.

Timeframes

Timeframe ID	Description	Short name
1	Past hour	1h
2	Past day	1d
3	Past week	1w
4	Past 2 weeks	2w
5	Past 30 days	30d
6	Past 12 months	12m
7	Lifetime	life

Example:

```
{
    "organizationID":1,
    "userFirstName":"Automated",
    "userLastName":"Creation",
    "subjectID":"0001",
    "numberOfInterviews":1,
    "language":1,
    "timeframeID":4,
    "tests":
        [
            {
                "type":"mdd"
            },
            {
                "type":"dep",
                "timeframeID":5
            }
        ],
    "condTestFlags":[1],
    "complEmailFlag":2
}
```

Response

If the request is successful, the response body is an array of JSON objects, each object representing an interview and the credentials needed to be able to administer that interview.

Property	Type	Description
organizationID	number	The registered organization ID
interviewID	number	The number that uniquely identifies the interview in the CAT-MH™ system.
identifier*	string	A randomized unique string that can be sent in a **POST** HTTP request to the **interview/signin** web service in order to administer the interview.
signature*	string	A randomized unique string that can be sent in a **POST** HTTP request to the **interview/signin** web service in order to administer the interview.

NOTE: Once an interview is completed, its identifier and signature are deleted from the system.

Example:

```
{
    "interviews":
        [
            {
                "organizationID":1,
                "interviewID":12345,
                "identifier":"a9b3",
                "signature":"1zrd4f"
            },
            {
                "organizationID":1,
                "interviewID":12356,
                "identifier":"3mp8",
                "signature":"bx5t8v"
            }
        ]
}
```

Retrieving Interview Status Information

You can retrieve information about the status of an interview by sending a single request to the **interview/status** web service.

To retrieve the status of an interview, send a **POST** HTTP request to:

https://www.cat-mh.com/portal/secure/interview/status

Request Headers

Header	Value	Description
applicationid	<To be provided>	The encoded ID of the application (client)

Request Body
The request body should be a JSON object with the following properties:

Property	Type	Value	Description
organizationID	number	<To be provided>	The registered organization ID
interviewID	number		The number that uniquely identifies the interview in the CAT-MH™ system, as provided in the response to an interview creation request.

Property	Type	Value	Description
identifier*	string		A randomized unique string that can be sent in a **POST** HTTP request to the **interview/signin** web service in order to administer the interview.
signature*	string		A randomized unique string that can be sent in a **POST** HTTP request to the **interview/signin** web service in order to administer the interview.

NOTE: Once an interview is completed, its identifier and signature are deleted from the system.

Example:

```
{
    "organizationID":1,
    "interviewID":12345,
    "identifier ":"a9b3",
    "signature ":"1zrd4f "
}
```

Response

If the request is successful, the response body is a JSON object with the following properties:

Property	Type	Description
interviewValid	boolean	• true if the organizationID and the interviewID provided in the request match an interview in the CAT-MH™ system. • false otherwise.
credentialsValid	boolean	• null if interviewValid is false. • true if the identifier and signature provided in the request match the interview credentials in the CAT-MH™ system. • false if the identifier and signature provided in the request do not match the interview credentials in the CAT-MH™ system, or the interview has been completed.
startTime*	number	The start of the interview in milliseconds since Unix epoch (i.e., January 1, 1970 midnight UTC/GMT). This value is null if the subject has not answered the first question.
endTime*	number	The end of the interview in milliseconds since Unix epoch (i.e., January 1, 1970 midnight UTC/GMT). This value is null if the subject has not completed the interview.

Property	Type	Description
inProgress*	boolean	• true if the subject is currently taking the interview or the session was not terminated by signing out of the CAT-MH™ system. • false if the subject is not currently taking the interview, or he signed out of the CAT-MH™ system after a previous attempt to take the interview, or the interview was completed.

*NOTE: A value of null is returned in the following circumstances:
- *interviewValid is false.*
- *the identifier and signature provided in the request do not match the interview credentials in the CAT-MH™ system for an interview that has not been completed.*

Example:

The following JSON object is returned if the organizationID and the interviewID provided in the request match an interview in the CAT-MH™ system, and the identifier and signature also match the interview credentials for an interview that has not been started.

```
{
        "interviewValid":true,
        "credentialsValid":true,
        "startTime":null,
        "endTime":null,
        "inProgress":false
}
```

Administering an Interview

Authentication

To be able to administer an interview via the CAT-MH™ API, you must first send the interview credentials in a request to the **interview/signin** web service.

To begin administering an interview, send a **POST** HTTP request to:

https://www.cat-mh.com/interview/signin

Request Headers

Header	Value	Description
Content-Type	application/x-www-form-urlencoded	Keys and values are encoded in key-value tuples separated by '&', with a '=' between the key and the value.

Request Body

Parameter	Description
j_username	Required. The identifier of the created interview.
j_password	Required. The signature of the created interview.
interviewID	Optional. The interview ID of the created interview.

Example:

j_username=rh4t&j_password=2fs5cz&interviewID=10001

Response

If successfully authenticated, the response will have a status code of **302 Found** and the **Location** response header will be https://www.cat-mh.com/interview/secure/index.html. Additionally, two HTTP cookies (**JSESSIONID** and **AWSELB**) will be included in the **Set-Cookie** header. You must save the HTTP cookies and include them in the **Cookie** header of every subsequent HTTP request.

Example:

JSESSIONID=ymOPw72ci6jeBibjJq3ca3np.ip-172-31-24-54; path=/interview; secure; HttpOnly

AWSELB=B3BD39AF16F0CF0B7377E928EC0A11EA291D20E9280654915BB0D2B0C64597CFFC8D11A03D
DAA378D175FAFCC8D6F00508243C6EBB8818EFE4B8D60FA4409C8093B13010D6;PATH=/

In Progress Interview

When you sign in to take an interview, the interview becomes locked. If you don't sign out while in the middle of the interview or if the current interview session expires after 30 minutes of inactivity, the interview stays locked. The next time you try to sign in with that interview's credentials the **Location** response header will be https://www.cat-mh.com/interview/secure/errorInProgress.html.

To proceed with the interview, send a **POST** HTTP request to:

https://www.cat-mh.com/interview/secure/breakLock

NOTE: Include the JSESSIONID and AWSELB cookies in the Cookie header of this request. These HTTP cookies were provided in the Set-Cookie response header of the authentication request.

If successful, the response will have a status code of **302 Found** and the **Location** response header will be https://www.cat-mh.com/interview/secure/index.html.

Timed Out Session

The current interview session expires after 30 minutes of inactivity. If you try to initialize the interview or retrieve a question after the session has expired, the response will have a status code of **200 OK** and the response body will contain the html of the **Session Timed Out** error page (https://www.cat-mh.com/interview/errorTimeout.html).

To resume administering the interview, you will need to restart the process by sending another request to the **interview/signin** web service (see Authentication). Once successfully authenticated, continue with the steps described below.

Initializing the Interview

To initialize the interview after having been authenticated, send a **GET** HTTP request to:

https://www.cat-mh.com/interview/rest/interview

Request Headers

Header	Value
Accept	application/json
Cookie	JSESSIONID=<JSESSIONID>; AWSELB=<AWSELB>

*NOTE: Replace <JSESSIONID> and <AWSELB> with the HTTP cookies provided in the **Set-Cookie** response header of the interview authentication request (see Authentication).*

Response

The response body of a successful request will be a JSON object with the following properties:

Property	Type	Description
id	number	The number that uniquely identifies the interview in the CAT-MH™ system.
startTime	number	The start of the interview in milliseconds since Unix epoch (i.e., January 1, 1970 midnight UTC/GMT). This value is null if the subject has not answered the first question.
endTime	number	The end of the interview in milliseconds since Unix epoch (i.e., January 1, 1970 midnight UTC/GMT). This value is null if the subject has not completed the interview.
iter	number	The current question number, starting with 0 for the first question.
languageID	number	• 1 for English • 2 for Spanish • 3 for Chinese - simplified • 4 for Chinese - traditional
interviewTests	array	Array of integer test type IDs.
conditionalTests	array	This value is null because it was designed to be used by the CAT-MH™ Interview web client.

Property	Type	Description
subjectID	number	This value is null because it was designed to be used by the CAT-MH™ Interview web client.
displayResults	number	This value is 0 because it was designed to be used by the CAT-MH™ Interview web client.

If the id value is greater than 0, initialize the screen based on the interview language and request the first question. Otherwise, send a signout request (see Terminating the Current Interview Session).

Example:

```
{
    "id":12345,
    "startTime":null,
    "endTime":null,
    "iter":0,
    "languageID":1,
    "interviewTests":[1,5],
    "conditionalTests":null,
    "subjectID":null,
    "displayResults":0
}
```

Retrieving a Question

To retrieve the first/next question in the interview, send a **GET** HTTP request to:

https://www.cat-mh.com/interview/rest/interview/test/question

Request Headers

Header	Value
Accept	application/json
Cookie	JSESSIONID=<JSESSIONID>; AWSELB=<AWSELB>

*NOTE: Replace <JSESSIONID> and <AWSELB> with the HTTP cookies provided in the **Set-Cookie** response header of the interview authentication request (see Authentication).*

Response

The response body of a successful request will be a JSON object with the following properties:

Property	Type	Description
questionID*	number	The number that uniquely identifies the question in the CAT-MH™ system.
questionNumber	number	The current question number, starting at 0.
questionDescription	string	The text to be displayed for this question.
questionAnswers	array	A list of JSON objects, each object representing one of the answers for that question (see below).
questionAudioID	number	A number that can be used to determine which audio file to play when displaying this question.
questionSymptom	string	This is null for most questions; when it is not null, it is displayed above the question description and prepended by "Symptom list: ", "Lista de los síntomas:", "症状列表：" or "症狀列表：", depending on the interview language.
questionSymptomFlag	number	The type of symptom message to display. 0 if no symptom, 1 if symptom to display
audioExtension	string	Used in determining which audio file to use for a question if multiple versions are available.
timeframeID	number	See the Timeframes table on page 4.
questionNoteID	number	If greater than 0, the ID of the message to be displayed prior to the question text as described below in questionNote.
questionNote	string	If not null, display this message prior to the current question text (e.g., message indicating the test's timeframe, at the start of the interview or if different from that of the previous test).
answerType	number	1 for radio buttons, 2 for checkboxes
questionFooter	string	Message displayed below the question.

*NOTE: If questionID is greater than 0, display the question. Otherwise, if the questionID is -1, the interview has been completed and you can send a request to retrieve the interview results (see Retrieving the Interview Results).

If not retrieving interview results, you should send a signout request to ensure proper cleanup of resources and removal of the current interview session from the server (see Terminating the Current Interview Session).

The JSON object that represents a question answer has the following properties:

Property	Type	Description
answerOrdinal	number	The number that indicates the position of this answer in the list of answers for the current question, starting with 1 for the first answer.
answerDescription	string	The text to be displayed for this answer.
answerWeight	number	A value used in determining how to weigh the subject's response in the algorithm.

Example:

```
{
    "questionID":14,
    "questionNumber":2,
    "questionDescription":"How much of the time did you feel depressed?",
    "questionAnswers":[
        {
            "answerOrdinal":1,
            "answerDescription":"None of the time",
            "answerWeight":1.0
        },
        {
            "answerOrdinal":2,
            "answerDescription":"A little of the time",
            "answerWeight":2.0
        },
        {
            "answerOrdinal":3,
            "answerDescription":"Some of the time",
            "answerWeight":3.0
        },
        {
            "answerOrdinal":4,
            "answerDescription":"Most of the time",
            "answerWeight":4.0
        },
        {
            "answerOrdinal":5,
            "answerDescription":"All of the time",
            "answerWeight":5.0
        }
    ],
    "questionAudioID":14,
    "questionSymptom":null,
    "questionSymptomFlag":0,
    "audioExtension":"",
    "timeframeID":4,
    "questionNoteID":0,
    "questionNote":null,
    "answerType":1,
    "questionFooter":null
}
```

If questionID is greater than 0, display the question. Otherwise, if the questionID is -1, the interview has been completed and you can send a request to retrieve the interview results (see Retrieving the Interview Results).

NOTE: If not retrieving interview results, you should send a signout request to ensure proper cleanup of resources and removal of the current interview session from the server (see Terminating the Current Interview Session).

Submitting the Selected Answer

To submit the answer selected by the subject, send a **POST** HTTP request to:

https://www.cat-mh.com/interview/rest/interview/test/question

Request Headers

Header	Value
Content-Type	application/json
Cookie	JSESSIONID=<JSESSIONID>; AWSELB=<AWSELB>

NOTE: Replace <JSESSIONID> and <AWSELB> with the HTTP cookies provided in the **Set-Cookie** response header of the interview authentication request (see Authentication).

Request Body

The request body should be a JSON object, indicating the current question and the answer selected:

Property	Type	Description
questionID	number	The number that uniquely identifies the question in the CAT-MH™ system.
response	number	The answerOrdinal value of the answer selected by the subject if the question's answerType was 1 (for radio buttons). If not specified, default value is 0.
chkResponses	array	A list of the answerOrdinal values of the selected checkbox(es) if the question's answerType was 2 (for checkboxes). If not specified, default value is null.
duration	number	The number of milliseconds from when the question was displayed to when the subject submits an answer.
curT1	number	This value should be 0.
curT2	number	This value should be 0.
curT3	number	This value should be 0.

Example:

If the question's answerType was 1 (for radio buttons):

```
{
    "questionID":14,
    "response":2,
    "duration":4492,
    "curT1":0,
    "curT2":0,
    "curT3":0
}
```

If the question's answerType was 2 (for checkboxes):

```
{
    "questionID":9346,
    "chkResponses":[1,3],
    "duration":8572,
    "curT1":0,
    "curT2":0,
    "curT3":0
}
```

NOTE: If a single answer checkbox was selected (e.g., 3) the response should still be included in an array: e.g., "chkResponses":[3].

Response

If the request was successful, the response will have a status code of **200 OK** and no data will be returned in the response body. Since no error status was returned, request the next question (see Retrieving a Question).

Retrieving the Interview Results

You can retrieve interview results for the current interview session once the interview is completed. If you request the interview results prior to the completion of the interview, only the results of the tests completed up to that point will be included in the JSON object response.

NOTE: You can only retrieve interview results via the CAT-MH™ API for interviews that have been created using the CAT-MH™ API (see Creating an Interview) and while the interview credentials remain valid (i.e., during the current interview session prior to signing out).

After receiving a response containing the interview results, and if the interview has been completed, you should send a signout request to ensure proper cleanup of resources and removal of the current interview session from the server (see Terminating the Current Interview Session).

To retrieve the results for the current interview, send a **GET** HTTP request to:

https://www.cat-mh.com/interview/rest/interview/results

To retrieve item responses for each test in the interview, include the optional **itemLevel** query parameter:

https://www.cat-mh.com/interview/rest/interview/results?itemLevel=1

NOTE: To explicitly indicate that item level data should not be included in the test results, you can specify itemLevel=0 in the URL above.

Request Headers

Header	Value
Content-Type	application/json
Cookie	JSESSIONID=<mark><JSESSIONID></mark>; AWSELB=<mark><AWSELB></mark>

*NOTE: Replace <JSESSIONID> and <AWSELB> with the HTTP cookies provided in the **Set-Cookie** response header of the interview authentication request (see Authentication).*

Response

The response body of a successful request will be a JSON object with the following properties:

Property	Type	Description
interviewId	number	The number that uniquely identifies the interview in the CAT-MH™ system.
subjectId	string	The string that uniquely identifies the subject in the CAT-MH™ system.
startTime	number	The start of the interview in milliseconds since Unix epoch (i.e., January 1, 1970 midnight UTC/GMT). This value is null if the subject has not answered the first question.
endTime	number	The end of the interview in milliseconds since Unix epoch (i.e., January 1, 1970 midnight UTC/GMT). This value is null if the subject has not completed the interview.
timeframeId	number	See the Timeframes table on page 4.
tests	array	A list of JSON objects, each object representing a completed test that is included in the current interview (see below).

The JSON object that represents a completed test has the following properties:

Property	Type	Description
type	string	The type of the current test, usually an abbreviation of its test type label.
label	string	The name of the current test's type, which is usually displayed on the screen.
timeframeId	number	See the Timeframes table on page 4.
diagnosis	string	It can have the value "negative" or "positive". It is null when it is not applicable for the current test type. See the table below for a list of test types for which a non-null value is returned.
confidence	number	It is a number between 0 and 100 with one decimal place. It is null when it is not applicable for the current test type. See the table below for a list of test types for which a non-null value is returned.
severity	number	It is a number between 0 and 100 with one decimal place. It is null when it is not applicable for the current test type. See the table below for a list of test types for which a non-null value is returned.
category	string	It is a description of the severity. It is null when it is not applicable for the current test type. See the table below for a list of test types for which a non-null value is returned.
precision	number	It is a number between 0 and 100 with one decimal place. It is null when it is not applicable for the current test type. See the table below for a list of test types for which a non-null value is returned.
prob	number	It is a number between 0 and 1 with three decimal places. It is null when it is not applicable for the current test type. See the table below for a list of test types for which a non-null value is returned.
percentile	number	It is a number between 0 and 100 with one decimal place. It is null when it is not applicable for the current test type. See the table below for a list of test types for which a non-null value is returned.
items	array	A list of JSON objects, each object representing a test item (see below). It is null when item level data was not requested.

The JSON object that represents a test item has the following properties:

Property	Type	Description
questionId	number	The number that uniquely identifies the question in the CAT-MH™ system.

Property	Type	Description
response	number	The answerOrdinal value of the answer selected by the subject.
duration	number	The number of seconds from when the question was displayed to when the subject submitted an answer. This is usually a number with three decimal places. *NOTE: If this number is 0.0, the question was answered in a previous test in the current interview and the selected answer was used in the initial setup for the current test.*

The following is a list of non-null result properties returned for each test type:

Test Type	Name	Property
mdd	Major Depressive Disorder	diagnosis, confidence
dep	Depression	severity, category, precision, prob, percentile
anx	Anxiety Disorder	severity, category, precision, prob, percentile
m/hm	Mania/Hypomania	severity, category, precision
p-dep	Depression (Perinatal)	severity, category, precision, prob, percentile
p-anx	Anxiety Disorder (Perinatal)	severity, category, precision, prob, percentile
p-m/hm	Mania/Hypomania (Perinatal)	severity, category, precision
sa* (to be changed to sud)	Substance Use Disorder (formerly Substance Abuse)	severity, category, precision (More detailed test results are provided through the Control Panel.)
ptsd-dx	PTSD-Diagnosis	diagnosis, prob
ptsd	Post-Traumatic Stress Disorder	severity, category, precision
ptsd-e	PTSD-Expanded	severity, category, precision
psy-c	Psychosis - Clinician	severity, category, precision
psy-s	Psychosis - Self-Report	severity, category, precision
a/adhd	Adult ADHD	severity, category, precision
sdoh	Social Determinants of Health	severity, category, precision
c-ssrs	C-SSRS Suicide Screen	diagnosis
ss	Suicide Scale	severity, category, precision
cj-dep	Depression (Crim. Justice)	severity, category, precision, prob, percentile

Test Type	Name	Property
cj-anx	Anxiety Disorder (Crim. Justice)	severity, category, precision, prob, percentile
cj-m/hm	Mania/Hypomania (Crim. Justice)	severity, category, precision
cj-sud	Substance Use Disorder (CJ)	severity, category, precision
cj-ss	Suicide Scale (Crim. Justice)	severity, category, precision

NOTE: The sa (Substance Abuse) test type was renamed to sud (Substance Use Disorder). The API currently returns sa to support existing implementations, but will be changed in the future to return sud. During this transitional period, please ensure that you accept both sa and sud as valid identifiers for this test type.

Example:

The following is an example of the JSON object included in the response to a request for the results of an interview comprised of all the possible test types and where item level data was not requested:

```
{
    "interviewId":12345,
    "subjectId":"0001",
    "startTime":1484531266930,
    "endTime":1484532455833,
    "timeframeId":4,
    "tests":[
        {
            "type":"MDD","label":"Major Depressive Disorder","timeframeId":4,"diagnosis":"negative",
            "confidence":96.4,"severity":null,"category":null,"precision":null,"prob":null,
            "percentile":null,"items":null
        },
        {
            "type":"DEP","label":"Depression","timeframeId":4,"diagnosis":null,"confidence":null,
            "severity":57.9,"category":"mild","precision":4.9,"prob":0.921,"percentile":29.5,"items":null
        },
        {
            "type":"ANX","label":"Anxiety Disorder","timeframeId":4,"diagnosis":null,"confidence":null,
            "severity":22.3,"category":"normal","precision":5.2,"prob":0.072,"percentile":3.0,"items":null
        },
        {
            "type":"M/HM","label":"Mania/Hypomania","timeframeId":4,"diagnosis":null,
            "confidence":null,"severity":54.2,"category":"elevated","precision":7.4,"prob":null,
            "percentile":null,"items":null
        },
        {
            "type":"C-SSRS","label":"C-SSRS Suicide Screen","timeframeId":4,"diagnosis":"negative",
            "confidence":null,"severity":null,"category":null,"precision":null,"prob":null,"percentile":null,
            "items":null
        },
        {
            "type":"SS","label":"Suicide Scale","timeframeId":4,"diagnosis":null,"confidence":null,
            "severity":65.1,"category":"high risk","precision":4.8,"prob":null,"percentile":null,"items":null
        }
    ]
}
```

The following is an example of the JSON object included in the response to a request for the results of an interview comprised of the MDD and DEP test types and where item level data was requested:

```
{
    "interviewId":12346,
    "subjectId":"0002",
    "startTime":1484538912297,
    "endTime":1484539170177,
    "timeframeId":4,
    "tests":[
        {
            "type":"MDD","label":"Major Depressive Disorder","timeframeId":4,"diagnosis":"positive",
            "confidence":99.3,"severity":null,"category":null,"precision":null,"prob":null,"percentile":null,
            "items":[{"questionId":925,"response":3,"duration":5.002},
                {"questionId":927,"response":4,"duration":53.666},
                {"questionId":922,"response":5,"duration":8.997},
                {"questionId":924,"response":5,"duration":6.828}
            ]
        },
        {
            "type":"DEP","label":"Depression","timeframeId":4,"diagnosis":null,"confidence":null,
            "severity":87.5,"category":"severe","precision":4.9,"prob":0.999,"percentile":92.5,
            "items":[{"questionId":5,"response":5,"duration":0.0},
                {"questionId":9,"response":3,"duration":0.0},
                {"questionId":16,"response":5,"duration":0.0},
                {"questionId":117,"response":4,"duration":0.0},
                {"questionId":41,"response":4,"duration":56.013},
                {"questionId":240,"response":5,"duration":18.217},
                {"questionId":386,"response":4,"duration":7.611},
                {"questionId":84,"response":5,"duration":35.978},
                {"questionId":384,"response":4,"duration":8.323},
                {"questionId":288,"response":4,"duration":9.088},
                {"questionId":313,"response":4,"duration":10.97},
                {"questionId":279,"response":4,"duration":7.057},
                {"questionId":262,"response":4,"duration":6.165},
                {"questionId":146,"response":5,"duration":9.789},
                {"questionId":341,"response":4,"duration":7.552}
            ]
        }
    ]
}
```

Terminating the Current Interview Session

At the conclusion of an interview, you should send a signout request in order to clean up resources and remove the current interview session from the server.

To terminate the current interview session via the CAT-MH™ API, send a **POST** HTTP request to:

https://www.cat-mh.com/interview/signout

*NOTE: The **GET** method for this HTTP request is supported for legacy purposes, but will be deprecated in the future. Notice will be provided before the **GET** method is removed.*

Request Headers

Header	Value
Cookie	JSESSIONID=<JSESSIONID>; AWSELB=<AWSELB>

*NOTE: Replace <JSESSIONID> and <AWSELB> with the HTTP cookies provided in the **Set-Cookie** response header of the interview authentication request (see Authentication).*

Response

If successfully signed out, the response will have a status code of **302 Found** and the **Location** response header will be for a page on https://www.cat-mh.com/ depending on the status of the interview (e.g., not completed, completed, or suicide warning generated) unless custom completion URL(s) have been specified.

Additionally, a **Set-Cookie** response header will include the JSESSIONID HTTP cookie, indicating that the interview session associated with it has expired.

Example:

Header	Value
Set-Cookie	JSESSIONID=ymOPw72ci6jeBibjJq3ca3np.ip-172-31-24-54; path=/interview; secure; HttpOnly; Max-Age=0; Expires=Thu, 01-Jan-1970 00:00:00 GMT