

# Package ‘I2B2API’

May 28, 2015

**Title** API to i2b2 that is exposed to the R IDE

**Version** 1.0

## Description

This documentation describes the available functions that can be used in the R-IDE web interface.

**Depends** R (>= 3.0.2)

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**LazyData** true

## R topics documented:

getConcepts . . . . .	1
getObservations . . . . .	2
GetObservationsForConcept . . . . .	3
getObservationsWithLimit . . . . .	3
getPatients . . . . .	4
GetPatientSetDescription . . . . .	4
getPatientsWithLimit . . . . .	5
<b>Index</b>	<b>6</b>

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getConcepts	<i>Get the prefixes of all concepts that start with anything from the concepts list (all concepts by default)</i>
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## Description

Get the prefixes of all concepts that start with anything from the concepts list (all concepts by default)

**Arguments**

concepts      list of concepts to be compared to. Defaults to empty, meaning any prefix.  
 level         Aggregates ICD codes, e.g. Level 3 = ICD:M54\*, Level 1: ICD:M\*

**Value**

list of distinct concept\_cd prefixes

**Examples**

```
getConcepts()
getConcepts(c('K'), 3)
```

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getObservations	<i>Get all observations with specified properties</i>
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**Description**

Get all observations with specified properties

**Arguments**

interval       specifies the time frame where the observations should come from  
 concepts       specifies a subset where the observations should come from. Default is any concept.  
 level          specifies ICD level to aggregate, e.g. Level 3 = ICD:M54\*, Level 1: ICD:M\*  
 patient\_set    id of the desired patient set, defaults to -1

**Value**

list of observations with attributes patient\_num, concept\_cd\_sub

**Examples**

```
getObservations(list(start=i2b2DateToPOSIXlt("01/01/2009"), end=i2b2DateToPOSIXlt("01/01/2010")),
  concepts=c("\\ICD\\", "\\ATC\\"), level=3, patient_set=-1)
getObservations(list(start=i2b2DateToPOSIXlt("01/01/2009"), end=i2b2DateToPOSIXlt("01/01/2010")),
  concepts=c("\\ICD\\M00-M99\\M50-M54\\M54"), level=3, patient_set=-1)
```

---

`GetObservationsForConcept`*Get all observations for a specified concept with specified properties*

---

**Description**

Get all observations for a specified concept with specified properties

**Arguments**

<code>interval</code>	specifies the time frame where the observations should come from
<code>concept.path</code>	specifies the path for the concept where the observations should come from.
<code>patient_set</code>	id of the desired patient set, defaults to -1

**Value**

list of observations with attributes `patient_num`, `concept_cd_sub`, `counts`

**Examples**

```
getObservationsForConcept(list(start=i2b2DateToPOSIXlt("01/01/2009"), end=i2b2DateToPOSIXlt("01/01/2010")),  
  concept.path="\ICD\M00-M99\M50-M54\M54\\"", patient_set=-1)
```

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`getObservationsWithLimit`*Get observations with a limit to speed up development*

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**Description**

Get observations with a limit to speed up development

**Arguments**

<code>interval</code>	specifies start and end of the interval in a list
<code>concepts</code>	list of concepts for the observations
<code>level</code>	specifies the aggregation level of concepts
<code>patients_limit</code>	limit of observations to be returned

**Value**

list of observations with `patient_num`, `concept_cd>sub`, `counts`

**Examples**

```
getObservationsWithLimit(start=i2b2DateToPOSIXlt("01/01/2009"), end=i2b2DateToPOSIXlt("01/01/2010"),  
  concepts=c("\ICD\\"), level=3, patients_limit=1000)
```

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`getPatients`*Get all patients of a patient set*

---

**Description**

Get all patients of a patient set

**Arguments**

`patient_set`      Id of the desired patient set

**Value**

list of patients with `patient_num`, `sex_cd`, `birth_date`

**Examples**

```
getPatients(patient_set=-1)
```

---

`GetPatientSetDescription`*Get the description of a patient set*

---

**Description**

Get the description of a patient set

**Arguments**

`patient_set`      Id of the desired patient set

**Value**

string with description of the patient set

**Examples**

```
getPatientSetDescription(patient_set=42)
```

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`getPatientsWithLimit`    *Get patients of a patient set with a limit to speed up development*

---

### **Description**

Get patients of a patient set with a limit to speed up development

### **Arguments**

<code>patient_set</code>	Id of the desired patient set
<code>limit</code>	limit of patients to be returned

### **Value**

list of patients with `patient_num`, `sex_cd`, `birth_date`

### **Examples**

```
getPatients(patient_set=-1, limit=100)
```

# Index

getConcepts, [1](#)  
getObservations, [2](#)  
GetObservationsForConcept, [3](#)  
getObservationsWithLimit, [3](#)  
getPatients, [4](#)  
GetPatientSetDescription, [4](#)  
getPatientsWithLimit, [5](#)