PatientSupporter Rule Signatures (v1.0):

Note: With regards to N3 syntax, "_:" represents all instances of the subject. In actual implementation, the following format is used:

```
":subject_1 ...."
":subject_2...."
Etc.
```

Age:

Identifies the user's age for each individual profile.

```
POSL Syntax:
```

```
age(?ProfileID,?Age).
```

N3 Syntax:

```
_:age
```

```
rdf:type :Age;
:profileID ?ProfileID;
:age ?Age.
```

Usage:

ProfileID = The profile the age pertains to.

Age = The age associated with the profile.

AgeGroup:

Used to check to see if a profile associated age is within the specified age group.

POSL Syntax:

```
ageGroup(?ProfileID,?MinAge,?MaxAge,?Age).
```

N3 Syntax:

```
_:ageGroup
```

```
rdf:type :AgeGroup;
:profileID ?ProfileID;
:injury ?Injury;
:minAge ?MinAge;
:maxAge ?MaxAge.
```

Usage:

ProfileID = The profile identification corresponding to the age group requirement.

Injury = The type of injury the age group requirement pertains to.

MinAge = The minimum age of patients allowed in the profile's group of the given injury type.

MaxAge = The maximum age of patients allowed in the profile's group of the given injury type.

Category:

Defines whether the user of the profile is either an outpatient or inpatient.

POSL Syntax:

```
category(?ProfileID,?Category).
```

N3 Syntax:

```
_:category
```

```
rdf:type :Category;
:profileID ?ProfileID;
:category ?Category.
```

Usage:

ProfileID = The profile which the category pertains to.

Category = The category that patient profile falls under.

Communication:

Specifies available communication channels that the user of the profile uses.

POSL Syntax:

communication(?ProfileID,?Channel).

N3 Syntax:

```
_:communication
```

```
rdf:type :Communication;
:profileID ?ProfileID;
:channel ?Channel;
:contact ?Contact.
```

Usage:

ProfileID = The profile identification corresponding to the communication channel contact.

Channel = The type of communication device or program.

Contact = The user name for the given channel.

Duration:

The user specifies in their profile what duration a particular kind of group meeting can last for them.

POSL Syntax:

duration(?ProfileID,?Injury,dateTime[?DurYear,?DurMonth,?DurDay,?DurHour,?DurMinute]).

N3 Syntax:

_:duration

rdf:type :Duration; :profileID ?ProfileID; :injury ?Injury;

:duration [rdf:type:DateTime;

:year ?DurYear; :month ?DurMonth; :day ?DurDay; :hour ?DurHour;

:minute ?DurMinute].

Usage:

ProfileID = The profile identification which the duration pertains to.

Injury = The type of injury group the duration is meant for.

DurYear = The number of years in the duration.

DurMonth = The number of months in the duration.

DurDay = The number of days of duration.

DurHour = The number of hours of duration.

DurMinutes = The number of minutes of duration.

Events:

As a user performs events, or plans to perform events, they will be registered in the knowledge base as **Possible**, **Planned**, (**Performing**), or **Past** events. Possible events are events that do not have a specific injury assigned to them, but the user has indicated that he/she would like to perform a group meeting between the times registered. Planned refers to an event that has not happened yet, but has a specific injury assigned to it. Past events are events that have already occurred.

POSL Syntax:

event(?ProfileID,?Injury,?Tense, dateTime[?StartYear,?StartMonth, ?StartDay, ?StartHour, ?StartMinute], dateTime[?EndYear,?EndMonth, ?EndDay, ?EndHour, ?EndMinute]).

N3 Syntax:

```
_:event
```

rdf:type :Event; :calendarID ?ProfileID; :injury ?Injury; :tense ?Tense;

:startDateTime [rdf:type:DateTime;

:year ?StartYear; :month ?StartMonth; :day ?StartDay;
:hour ?StartHour;
:minute ?StartMinute];
:endDateTime [rdf:type :DateTime;
:year ?EndYear;
:month ?EndMonth;
:day ?EndDay;
:hour ?EndHour;
:minute ?EndMinute];

Usage:

ProfileID = The profile identification tied to the event.
Injury = The type of injury the event is planned for.
Tense = Possible, Planned, or Past. (As described above).
StartYear = The year for the starting date of the event.
StartMonth = The month for the starting date of the event.
StartDay = The day for the starting date of the event.
StartHour = The hour for the starting time of the event.
StartMinute = The minute for the starting time of the event.
EndYear = The year for the ending date of the event.
EndMonth = The month for the ending date of the event.
EndDay= The day for the ending date of the event.
EndHour = The hour for the ending time of the event.
EndMinute = The minute for the ending time of the event.

Gender:

Identifies the user's gender for each individual profile.

POSL Syntax:

gender(?ProfileID,?Gender).

N3 Syntax:

_:gender

rdf:type :Gender; :profileID ?ProfileID; :gender ?Gender.

Usage:

ProfileID = The profile identication corresponding to the gender fact. Gender = The gender associated with the profile.

GoodDuration:

This determines whether or not an event can be carried out based on the event time differences and the duration, via date time functions.

POSL Syntax:

goodDuration(?ProfileID, dateTime[?DurYear, ?DurMonth, ?DurDay, ?DurHour, ?DurMinute], dateTime[?StartYear, ?StartMonth, ?StartDay, ?StartHour, ?StartMinute], dateTime[?EndYear, ?EndMonth, ?EndDay, ?EndHour, ?EndMinute]).

N3 Syntax:

_:goodDuration

rdf:type :GoodDuration; :profileID ?ProfileID;

:duration [rdf:type:DateTime;

:year ?DurYear; :month ?DurMonth; :day ?DurDay; :hour ?DurHour;

:minute ?DurMinute];

:startDateTime [rdf:type :DateTime;

:year ?StartYear; :month ?StartMonth;

:day ?StartDay;
:hour ?StartHour;

:minute ?StartMinute];

:endDateTime [rdf:type :DateTime;

:year ?EndYear;
:month ?EndMonth;
:day ?EndDay;
:hour ?EndHour;
:minute ?EndMinute].

<u>Usage:</u>

ProfileID = The profile identification corresponding to the duration check.

DurYear = The number of years in the duration of the event.

DurMonth = The number of months in the duration of the event.

DurDay = The number of days of duration in the event.

DurHour = The number of hours of duration in the event.

DurMinutes = The number of minutes of duration in the event.

StartYear = The year for the starting date of the event.

StartMonth = The month for the starting date of the event.

StartDay = The day for the starting date of the event.

```
StartHour = The hour for starting time of the event.
```

StartMinute = The minute for starting time of the event.

EndYear = The year for the ending date of the event.

EndMonth = The month for the ending date of the event.

EndDay = The day for the ending date of the event.

EndHour = The hour for ending time of the event.

EndMinute = The minute for ending time of the event.

GroupSize:

User specifies in their profile what range of group sizes they'd like to be in while participating in specific activities.

POSL Syntax:

groupSize(?ProfileID,?Injury,?Min,?Max).

N3 Syntax:

```
_:groupSize
```

rdf:type :groupSize; :profileID ?ProfileID; :injury ?Injury; :min ?Min; :max ?Max.

Usage:

ProfileID = The profile identification corresponding to the fitness level.

Injury = The type of injury the group size pertains to.

Min = The minimum amount of patients for a group of the given injury type.

Max = The maximum amount of patients for a group of the given injury type.

Healing Stage:

Indicates what stage the user's healing is at for each specific injury they have.

POSL Syntax:

healingStage(?ProfileID,?Injury,?HealingStage).

N3 Syntax:

_:healingStage

```
rdf:type :HealingStage;
:profileID ?ProfileID;
:injury ?Injury;
:healingStage ?HealingStage.
```

Usage:

ProfileID = The profile identification corresponding to the healing stage.

Injury = The type of injury the healing stage pertains to.

HealingStage = The current healing stage of the injury.

MyDiscussion:

The profile rule to determine if the search fits one of it's injury group requirements.

POSL Syntax:

```
myDiscussion(?ProfileID,?Injury:Type,?MinAge,?MaxAge,?MinRSVP,?MaxRSVP, ?Category, ?Treatment, ?HealingStage, dateTime[?StartYear,?StartMonth,?StartDay,?StartHour,?StartMinute], dateTime[?EndYear,?EndMonth,?EndDay,?EndHour,?EndMinute], dateTime[?DurYear,?DurMonth,?DurDay,?DurHour,?DurMinute], ?Channel,?Contact,?Gender, ?TimeZone).
```

N3 Syntax:

_:myDiscussion

rdf:type :MyDiscussion; :profileID ?ProfileID; :injury ?Injury; ?MinAge; :minAge :maxAge ?MaxAge; :minRSVP ?MinRSVP; :maxRSVP ?MaxRSVP; :category ?Category; :treatment ?Treatment; :healingStage ?HealingStage; :startDateTime [rdf:type :DateTime;

> :year ?StartYear; :month ?StartMonth; :day ?StartDay;

:hour ?StartHour;

:minute ?StartMinute];

:endDateTime [rdf:type :DateTime;

:year ?EndYear;
:month ?EndMonth;
:day ?EndDay;
:hour ?EndHour;

:minute ?EndMinute];

:duration [rdf:type:DateTime;

:year ?DurYear;
:month ?DurMonth;
:day ?DurDay;
:hour ?DurHour;
:minute ?DurMinute]

:channel?Channel;:contact?Contact;:gender?Gender;:timeZone?TimeZone.

Usage:

ProfileID = The profile identification corresponding to the suggested injury event.

Injury = The type of injury that the group pertains to.

Category= The category of the group the duration is meant for.

MinAge = Minimum age of participants.

MaxAge = Maximum age of participants.

MinRSVP = Minimum number of participants.

MaxRSVP = Maximum number of participants.

StartYear = The year for the starting available date for the event.

StartMonth = The month for the starting date available for the event.

StartDay = The day for the starting date available for the event.

StartHour = The hour for the starting time available for the event.

StartMinute = The minute for the starting available time for the event.

EndYear = The year for the ending date available for the event.

EndMonth = The month for the ending date available for the event.

EndDay= The day for the ending date available for the event.

EndHour = The hour for the ending time available for the event.

EndMinute = The minute for the ending time available for the event.

DurYear = The number of years in the duration of the event.

DurMonth = The number of months in the duration of the event.

DurDay = The number of days of duration in the event.

DurHour = The number of hours of duration in the event.

DurMinutes = The number of minutes of duration in the event.

Channel = The type of communication device or program.

Contact = The user name for the given channel.

Gender = Gender of participants.

Time Zone = Time zone of participants.

Participation

Used to check to see if a profile associated groupSize requirements is within the specified group size.

POSL Syntax:

participation(?ProfileID,?Injury,?MinRSVP,?MaxRSVP).

N3 Syntax:

N/A

Usage:

ProfileID = The profile identification corresponding to the fitness level.

Injury = The type of injury that the group pertains to.

MinRSVP = The given minimum group size to compare against the profile's preferences.

MaxRSVP = The given maximum group size to compare against the profile's preferences.

TimeZone:

Identifies the user's time-zone for each individual profile.

POSL Syntax:

timezone(?ProfileID,?TimeZone).

N3 Syntax:

```
_:timeZone
```

rdf:type:TimeZone;

:profileID ?ProfileID;

:timeZone ?TimeZone.

<u>Usage:</u>

ProfileID = The profile identification which the time zone pertains to.

TimeZone = The time zone relevant to the profile.

Treatment:

Indicates what treatment the user is receiving for each specific injury they have.

POSL Syntax:

treatment(?ProfileID,?Injury,?Treatment).

N3 Syntax:

_:treatment

rdf:type :Treatment; :profileID ?ProfileID; :treatment ?Treatment.

<u>Usage:</u>

ProfileID = The profile identification corresponding to the fitness level.

Injury = The type of injury that the treatment pertains to.

Treatment = The treatment type of the given injury.

Currently Used Body Partonomy

