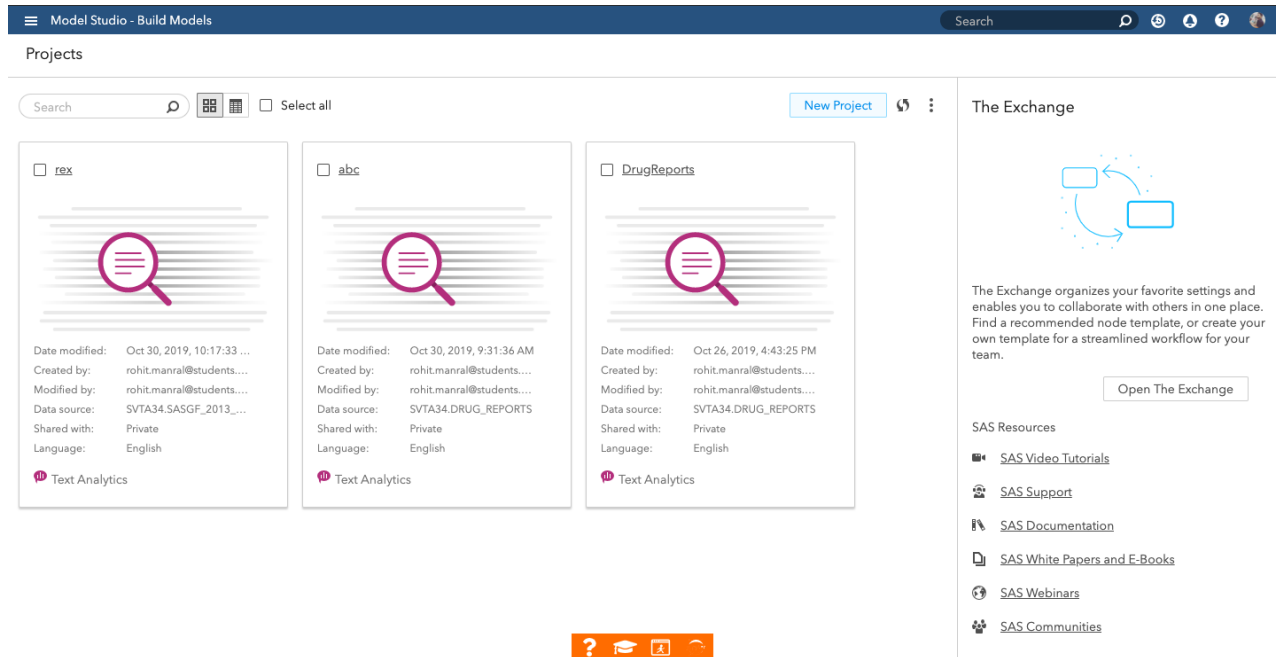


# Assignment 3 - Data Analysis

## Using SAS Viya Learners

**Step 1:** Just after signing up with SAS, you will a screen like this:



**Step 2:** Select *New* → *Model Studio Project* or *New Project*

Then, a new sub-screen will be popped up where you have to fill the necessary details of our New Project.

**New Project**

Name: \*  
Big\_Data\_Assignment3\_Drug\_Reports

Type: \*  
Text Analytics

Data source: \*  
SVTA34.DRUG\_REPORTS Browse

Project language: \*  
English

Description:  
Big Data Assignment 3

Save Cancel

Then, *Text Analysis* will be selected as Type and *SVTA34.DRUG\_REPORTS* as a Data Source. After that, I selected *DrugReport* variable as a *Text*.

Model Studio - Build Models

Big\_Data\_Assignment3\_Drug\_Reports

Data Pipelines

Project data table

DRUG\_REPORTS

Variable Name	Type	Role	Display Vari
<input type="checkbox"/> __uniqueid__	Numeric	Key	
<input type="checkbox"/> DrugReport	Character	Text	✓
<input type="checkbox"/> EXTENSION	Character		
<input type="checkbox"/> ID	Character		
<input type="checkbox"/> NAME	Character		

**DRUG\_REPORTS**

Columns: 5

Rows: 1.4 K

Label: Not available

Location: cas-v4e019-default/Analytics\_Project\_adaeb969-c-4f27-b34f-3474cc615446

I went to Pipelines from Data and ran Data & Concepts.



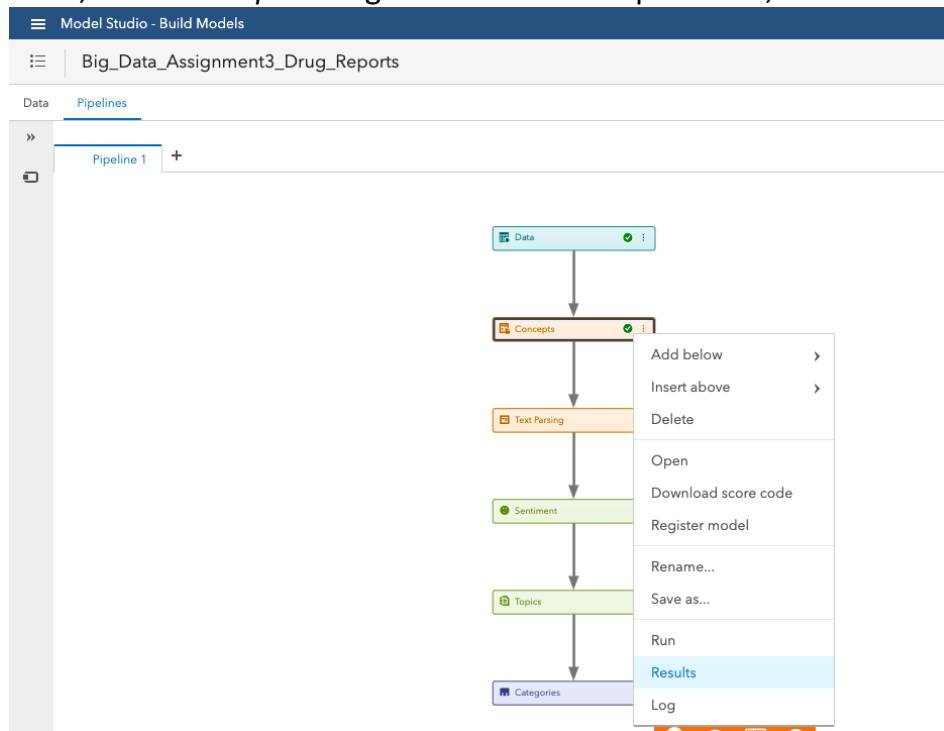
## Task 1 - How many documents mention a medication, or a dosage, or a side effect?

For Task 1, I used only SAS Viya for Learners.

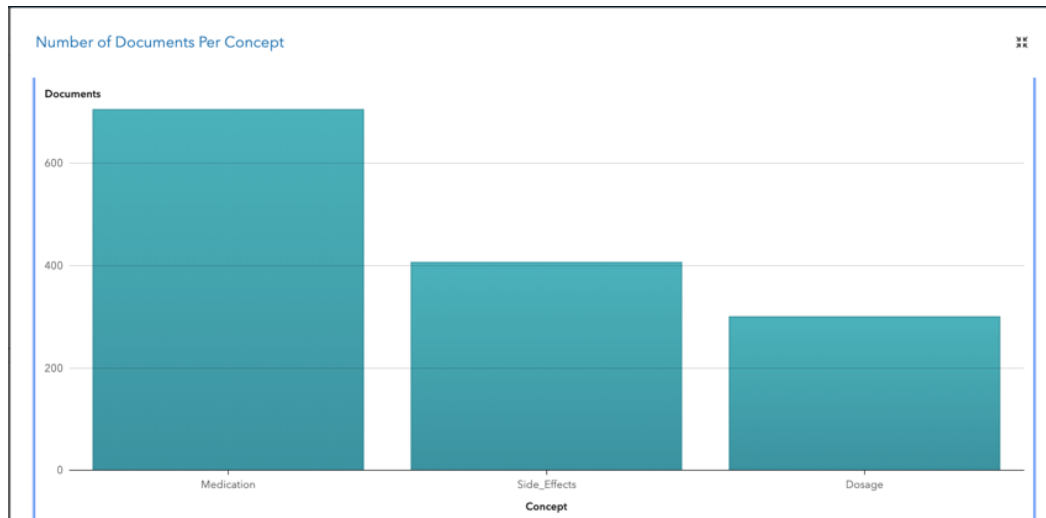
So, I created 3 different concepts ( medication, dosage, & side effect ) and pasted the required classifiers in all the 3 concepts from the three given text files. In addition, I validated the rules and ran node for every concept.

The screenshot shows the SAS Viya Model Studio interface. The top bar indicates 'Model Studio - Build Models'. The main panel is titled 'Big\_Data\_Assignment3\_Drug\_Reports' and 'Concepts'. On the left, a sidebar shows 'Predefined Concepts (0)' and 'Custom Concepts (3)', with 'Medication' selected. The 'Edit a Concept' window for 'Medication' is open, showing a list of 14 classifiers: CLASSIFIER:Abidal, CLASSIFIER:Abradon, CLASSIFIER:Acquil, CLASSIFIER:Ambutrin, CLASSIFIER:Amelorex, CLASSIFIER:Amicoran, CLASSIFIER:Amlican, CLASSIFIER:Aquiven, CLASSIFIER:Attentor, CLASSIFIER:Bifental, CLASSIFIER:Captalan, CLASSIFIER:Celifen, CLASSIFIER:Cenerol, and CLASSIFIER:Concordan. Below the list, a green checkmark indicates 'Code is valid.' The 'Documents' tab is also visible, showing a search for 'DrugReport' with 704 matches out of 1414 documents.

Then, I went to *Pipeline* again and *ran* Concepts. Then, selected *Results* for Concepts.

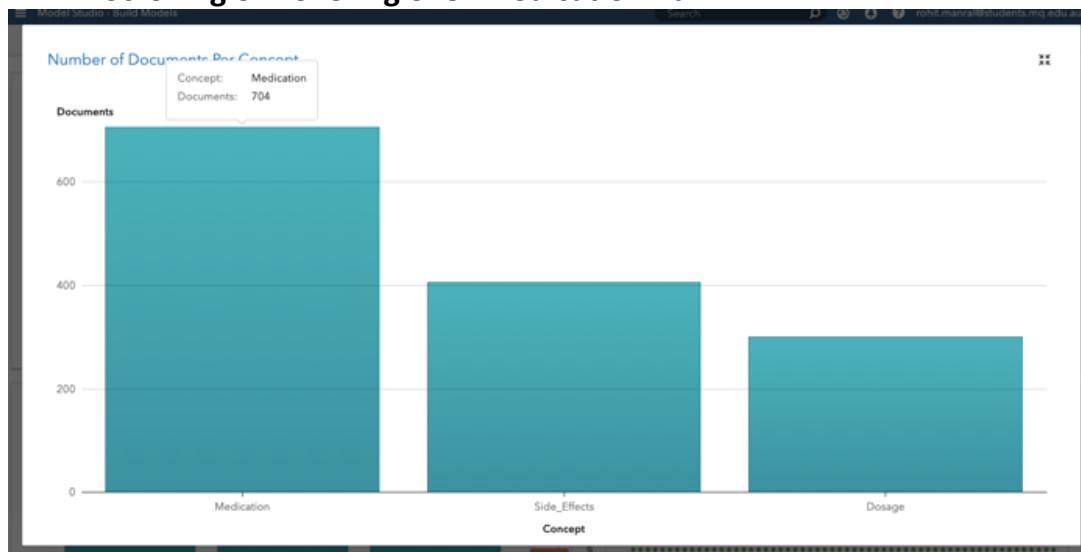


Finally, we will get the bar graph representing the count for Medication, Dosage, & SideEffects.



By scrolling or hovering over the different bars we can get the count of each element i.e. Medication, Dosage, & SideEffects.

- **Scrolling or hovering over Medication Bar**



- **Scrolling or hovering over Dosage Bar**



- Scrolling or hovering over SideEffects Bar



Therefore, **704** documents mention **Medication**, **300** documents mention **Dosage**, & **406** documents mention **SideEffects**.

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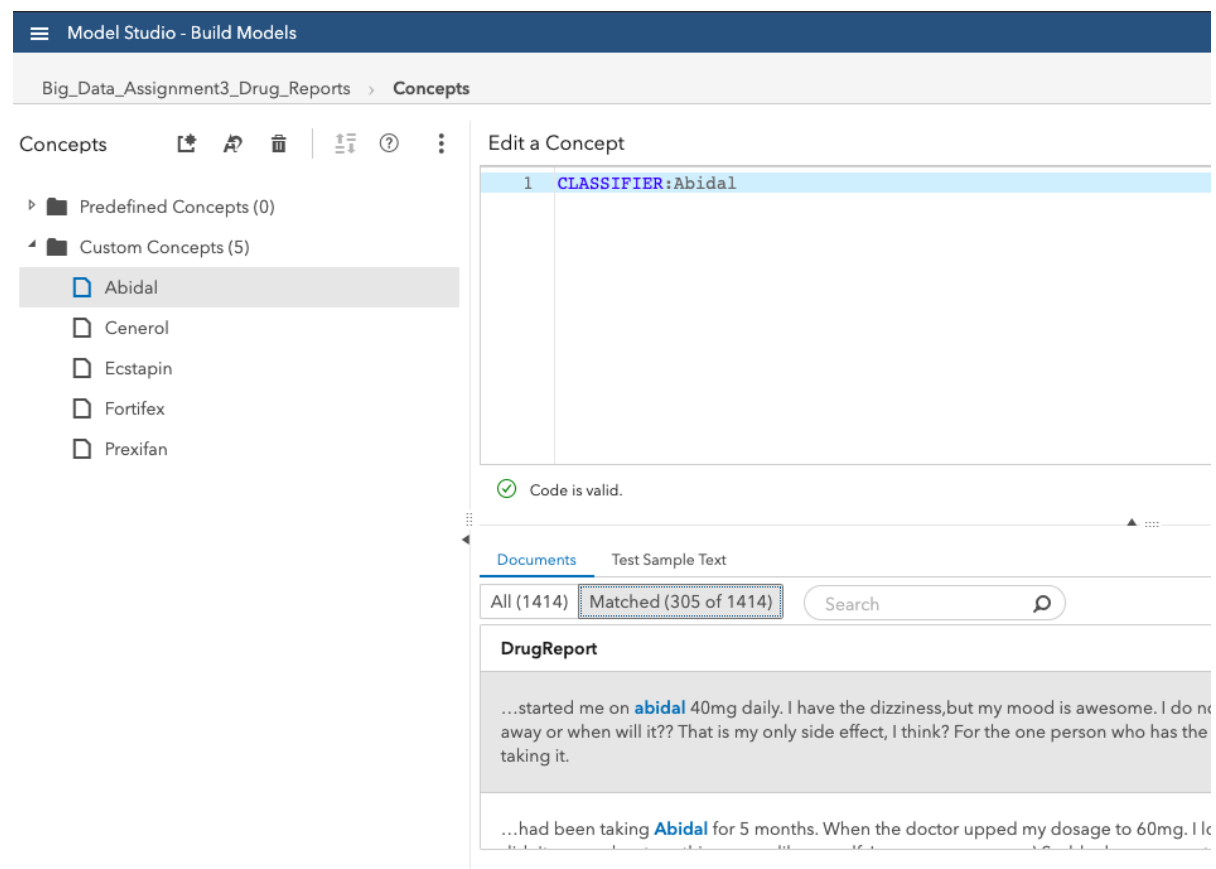
## Task 2 - How many documents mention each medication

**Display the counts of number of documents that mention each of the following medications:**

1. Abidal
2. Cenerol
3. Ecstapin
4. Fortifex
5. Prexifan

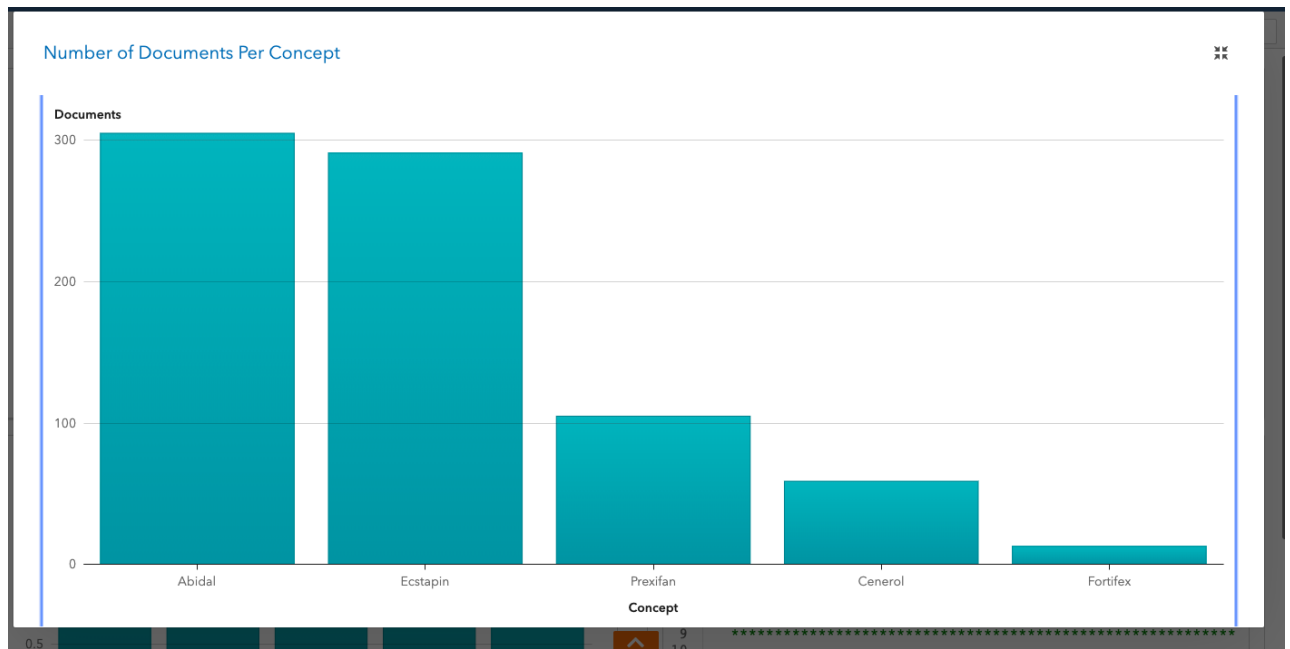
For Task 2, I used only SAS Viya for Learners.

So, I created 5 different concepts ( Abidal, Cenerol, Ecstapin, Fortifex, & Prexifan ) and pasted the required classifiers in all the 5 concepts from the given Medication text file. In addition, I validated the rules and ran node for every concept.



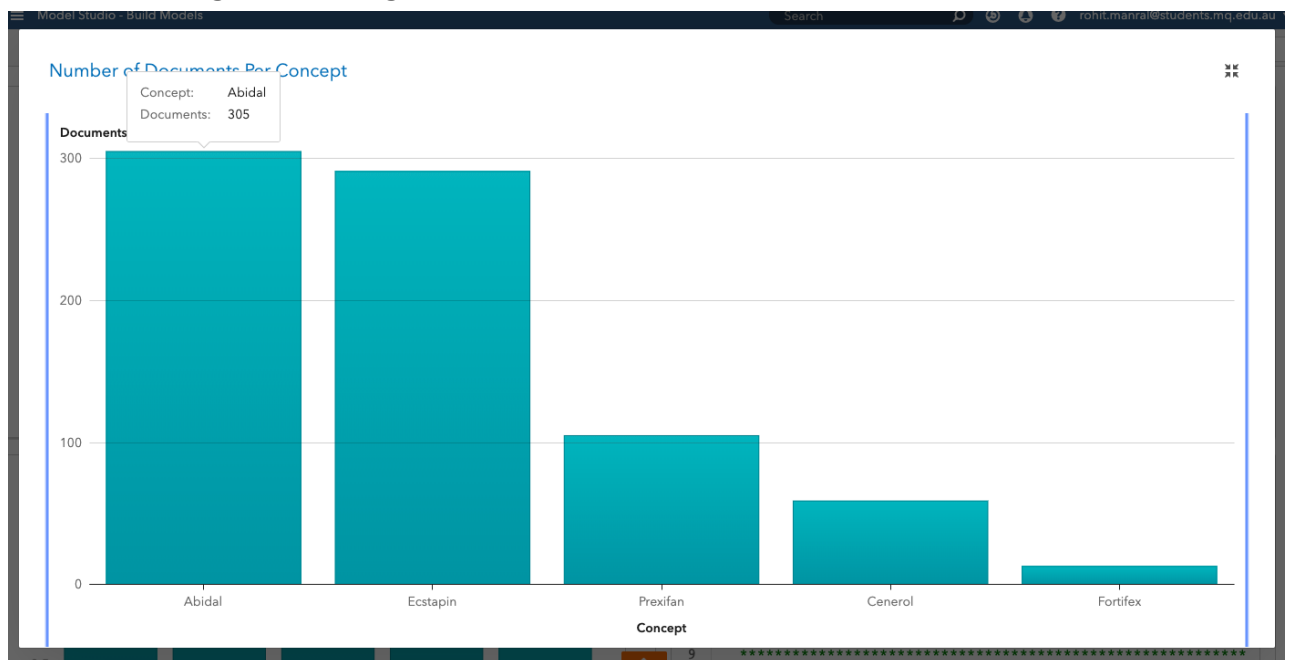
Then, we will go to *Pipeline* again and *run* Concepts. Then, select *Results* for Concepts.

Finally, we will get the bar graph representing the count for Abidal, Cenerol, Ecstapin, Fortifex, & Prexifan.



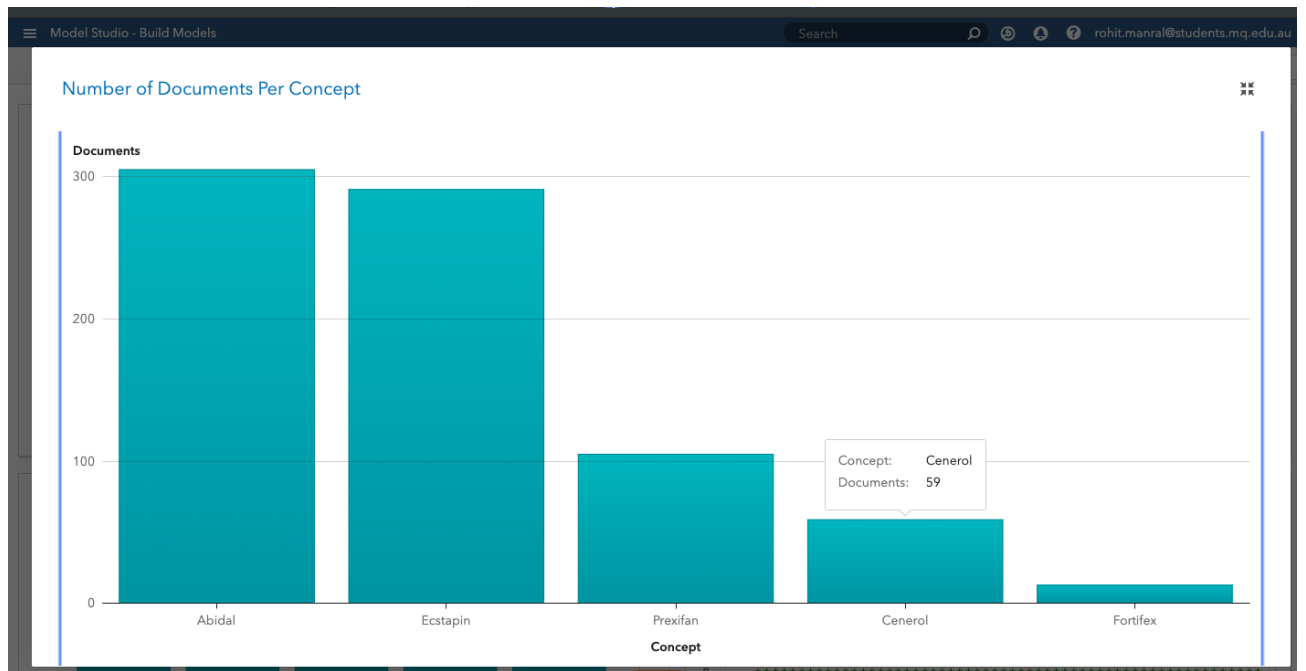
By scrolling or hovering over the different bars we can get the count of each element i.e. Abidal, Cenerol, Ecstapin, Fortifex, & Prexifan.

- **Scrolling or hovering over Abidal Bar**

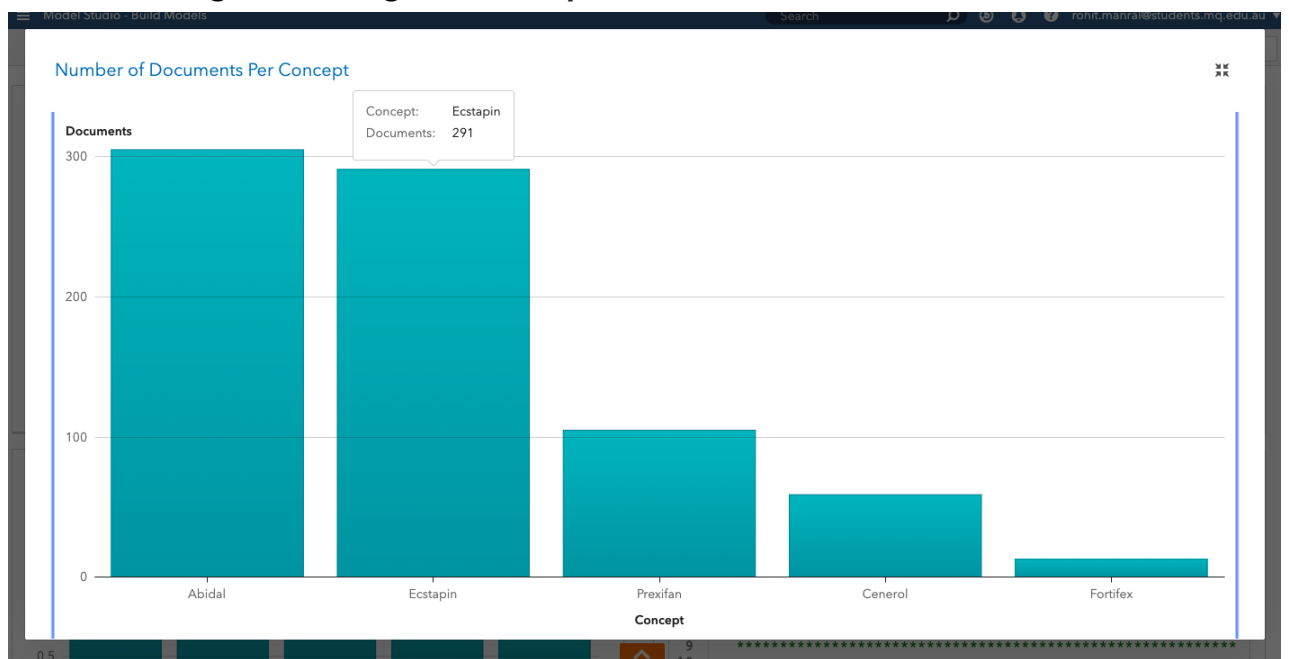


- **Scrolling or hovering over Cenerol Bar**





- Scrolling or hovering over Ecstapin Bar



- Scrolling or hovering over Fortifex Bar



- Scrolling or hovering over Prexifan Bar



Therefore, **305** documents mention **Abidal**, **59** documents mention **Cenerol**, **291** documents mention **Ecstapin**, **13** documents mention **Fortifex** & **105** documents mention **Prexifan**.

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### Task 3 (5 marks) - Which medications are associated with sleep issues?

Identify the medications that are associated with sleep issues. Your chart or charts should clearly indicate which medications have stronger associations with sleep issues, and they should quantify the degree of association.

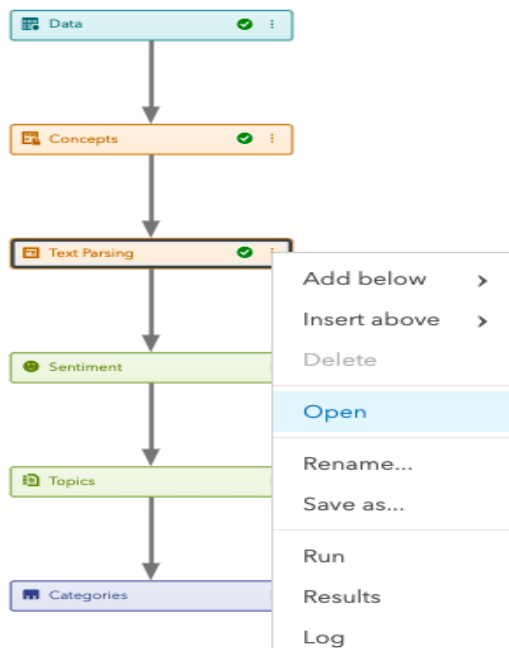
For Task 3, I used only SAS Viya for Learners.

So, I made 2 Custom Concepts i.e. Medication & Side Effects.

The screenshot displays the SAS Viya Model Studio interface. The top navigation bar shows 'Model Studio - Build Models'. Below it, the breadcrumb path is 'Big\_Data\_Assignment3\_Drug\_Reports > Concepts'. The left sidebar, titled 'Concepts', shows a tree structure with 'Predefined Concepts (0)' and 'Custom Concepts (2)'. Under 'Custom Concepts', 'Medication' is selected, and 'Side\_Effects' is listed below it. The main panel, titled 'Edit a Concept', shows a list of 14 CLASSIFIER entries for various medications. A green checkmark and the text 'Code is valid.' are visible below the list. At the bottom, there is a 'Documents' tab and a 'Test Sample Text' input field. The 'All (1414)' button is highlighted, and the 'Matched' button is also visible. The 'Search' button is present. The 'DrugReport' section is visible at the bottom, showing a snippet of text: 'causing extreme anger, to the point that my fami'.

Index	Classifier
1	CLASSIFIER:Abidal
2	CLASSIFIER:Abradon
3	CLASSIFIER:Acquil
4	CLASSIFIER:Ambutrin
5	CLASSIFIER:Amelorex
6	CLASSIFIER:Amicoran
7	CLASSIFIER:Amlican
8	CLASSIFIER:Aquiven
9	CLASSIFIER:Attentor
10	CLASSIFIER:Bifental
11	CLASSIFIER:Captalan
12	CLASSIFIER:Celifen
13	CLASSIFIER:Cenerol
14	CLASSIFIER:Concordan

Then, opened Text Parsing.



Then, searched for ***sleep*** in both the Kept terms and Dropped terms. In addition, added all the dropped terms in Kept terms.

Model Studio - Build Models

Big\_Data\_Assignment3\_Drug\_Reports > Text Parsing - Manage Terms

Run Node Close

Kept Terms (37)

Term	Role	Documents	Frequency
<input type="checkbox"/> sleep	V	106	127
<input type="checkbox"/> sleep	N	55	59
<input type="checkbox"/> sleepy	A	19	20
<input type="checkbox"/> sleeplessness	Side_Effects	10	10
<input type="checkbox"/> asleep	ADV	8	8
<input type="checkbox"/> sleepiness	N	4	5
<input type="checkbox"/> asleep	A	4	4

Dropped Terms (0)

No terms are available.

Documents

All (1414) Matched

DrugReport

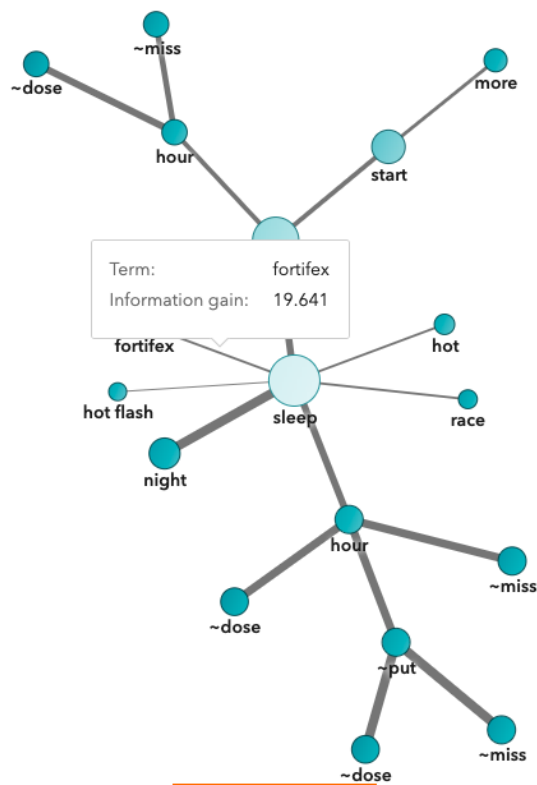
Finally, I started checking all the terms related to sleep one-by-one. Here, the word 'sleep' and its relevant words are present in many forms i.e. Verb, Noun, Adjective, Proper Noun, etc. So, I made a separate check for all of them using Term Map.

- **sleep (Verb)**

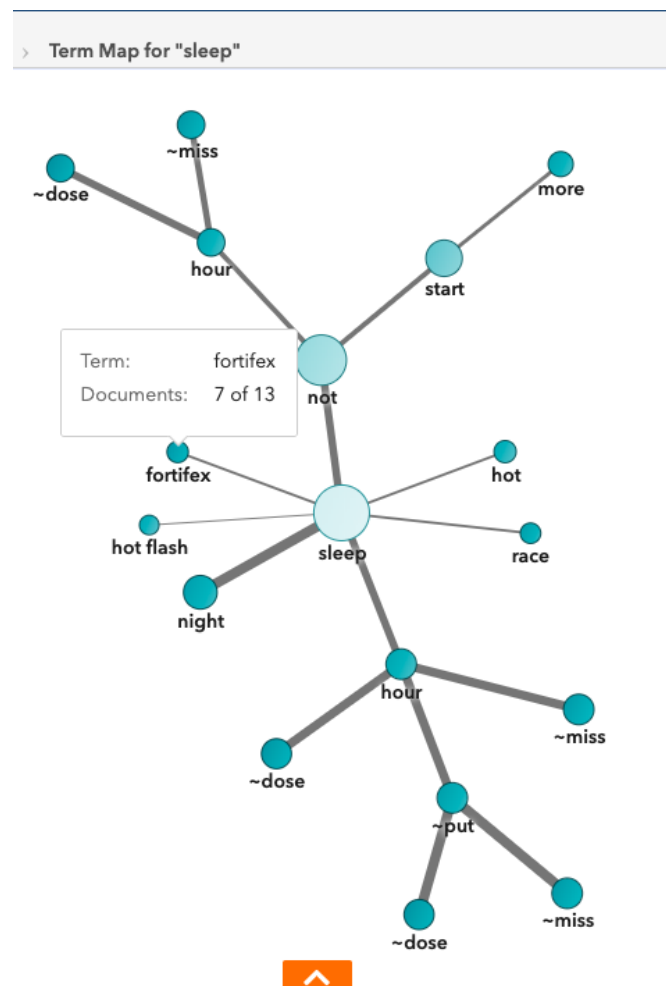
Documents

...am having trouble **sleeping**, however still have no energy, currently take 40 mg of norulen and a thyroid sup want is to feel the way I used to before I got sick with all of this.

- Term Map for "sleep"



The Information gain between sleep (Verb) and fortifex is 19.641.



So, there are total 13 fortifex **medications** out of those 7 are **associated with sleep (Verb)**.

- sleep (Noun)

Model Studio - Build Models

Big\_Data\_Assignment3\_Drug\_Reports > Text Parsing - Manage Terms

Kept Terms (37)

	Term ^	Role	Documents	Frequency ▾
<input type="checkbox"/>	▶ sleep	V	106	127
<input checked="" type="checkbox"/>	sleep	N	55	59
<input type="checkbox"/>	sleepy	A	19	20
<input type="checkbox"/>	sleeplessness	Side_Effects	10	10
<input type="checkbox"/>	asleep	ADV	8	8
<input type="checkbox"/>	sleepiness	N	4	5
<input type="checkbox"/>	asleep	A	4	4

Documents

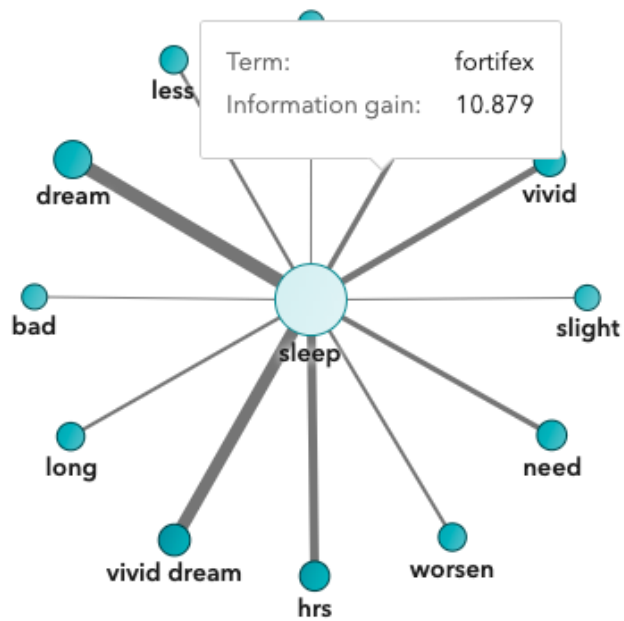
All (1414) Matched (55 of 1414)

Search

DrugReport

...only 4 hrs. **sleep** per night, BUT it is worth it.The only downside is that my insurance won't cover this medication a great disappointment for me and my family. I am hopeful that my Doctor will help me fight my insurance comp

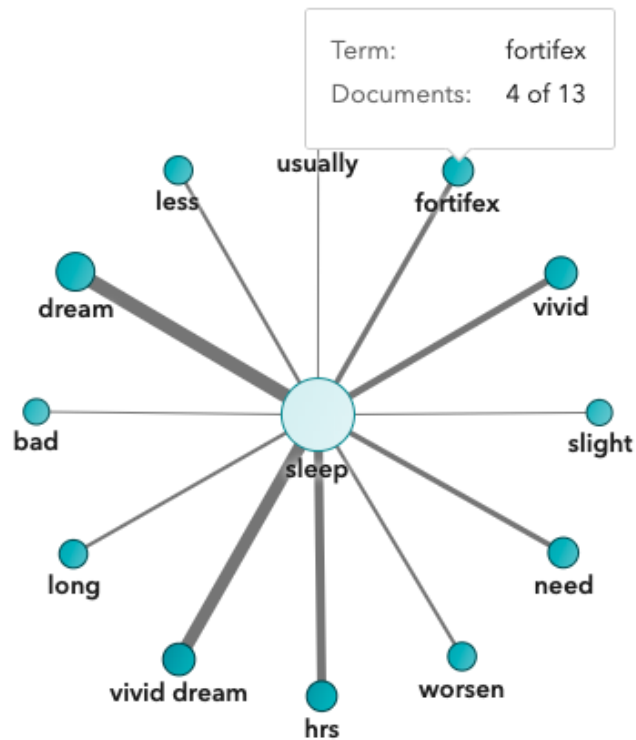
There are 55 'sleep' nouns in 1414 documents.



The Information gain between sleep (Noun) and fortifex is 10.879.



## Term Map for "sleep"



So, there are total 13 fortifex *medications* out of those 4 are *associated with sleep (Noun)*.

- *sleep issue (nlpNounGroup)*

Kept Terms (37)

	Term ^	Role	Documents	Frequency ▾
<input type="checkbox"/>	▷ sleep disturbance	nlpNounGroup	2	2
<input checked="" type="checkbox"/>	▷ sleep issue	nlpNounGroup	2	2
<input type="checkbox"/>	▷ sleep-aid	N	1	2
<input type="checkbox"/>	better sleep	nlpNounGroup	1	1
<input type="checkbox"/>	dont sleep	nlpNounGroup	1	1
<input type="checkbox"/>	eough sleep	nlpNounGroup	1	1
<input type="checkbox"/>	excessive			

## Documents

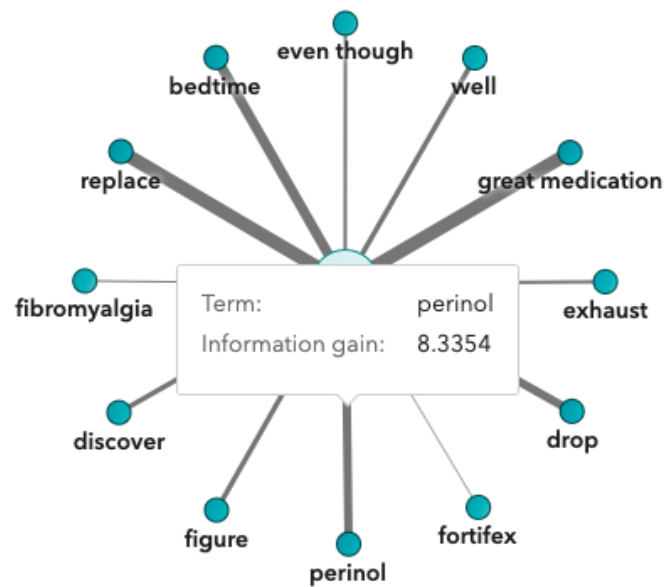
All (1414) Matched (2 of 1414)

### DrugReport

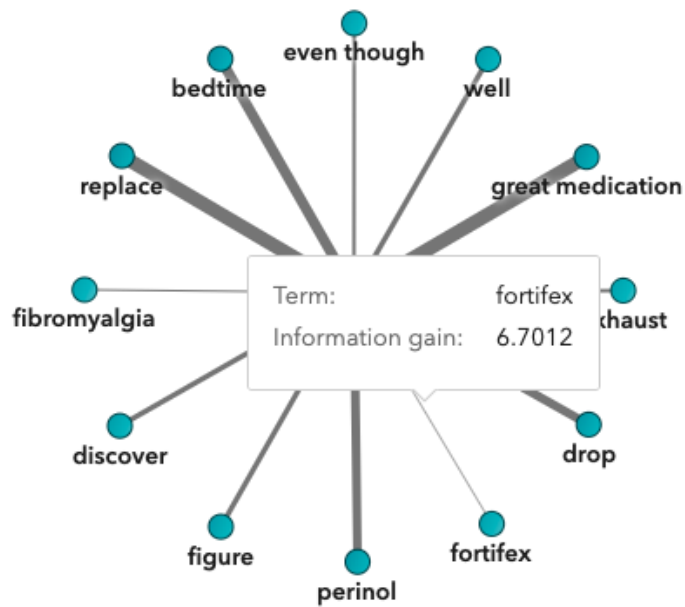
...doesn't help with **sleep issues** and fibromyalgia issues

...to get the **sleep issue** figured out once and for all. It took a second doctor (who now has replaced my form during the night even though I was taking Fortifex at bedtime. Stopping the Abidal suddenly, as I did, caused all my medications now that I've dropped Abidal (90 mg) and Perinol, kept the Exulactin, and have now adde

There are 2 'sleep issue' nouns in 1414 documents.

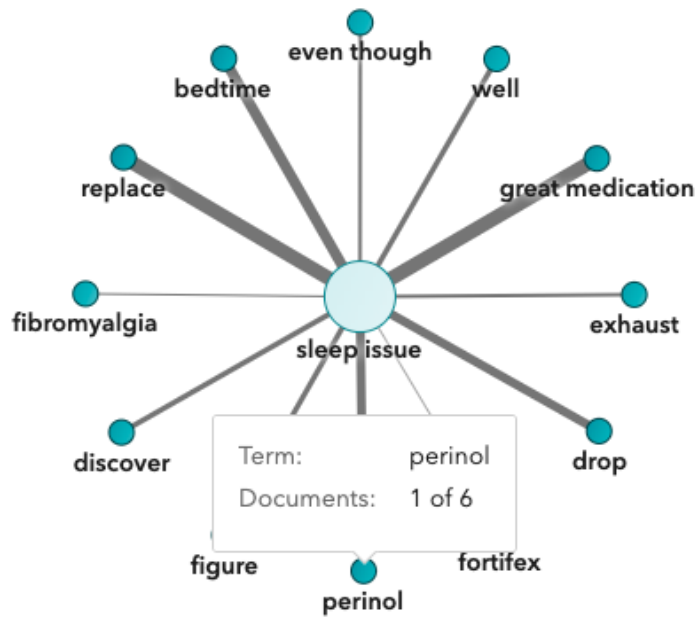


The Information gain between sleep issue (Noun) and perinol is 8.3354.



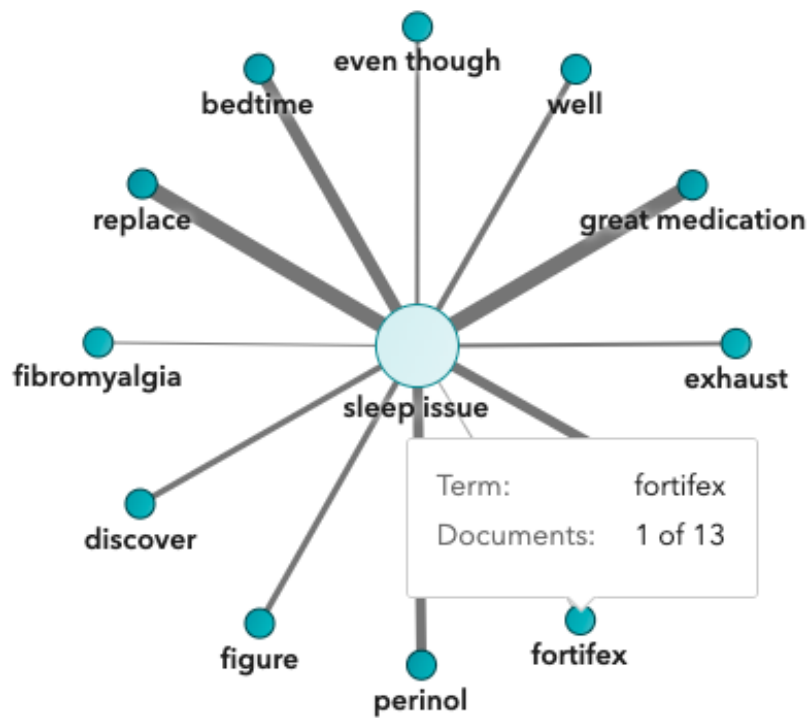
The Information gain between sleep issue (Noun) and fortifex is 6.7012.

> Term Map for "sleep issue"



So, there are total 6 perinol **medications** out of those 1 is **associated with sleep issue (Noun)**.

> Term Map for "sleep issue"



So, there are total 13 fortifex **medications** out of those 1 is **associated with sleep issue (Noun)**.

- **sleep-aid (Noun)**

Model Studio - Build Models

Big\_Data\_Assignment3\_Drug\_Reports
Text Parsing - Manage Terms

Kept Terms (37)

	Term ^	Role	Documents	Frequency ▼
<input type="checkbox"/>	▷ sleep disturbance	nlpNounGroup	2	2
<input type="checkbox"/>	▷ sleep issue	nlpNounGroup	2	2
<input checked="" type="checkbox"/>	▷ sleep-aid	N	1	2
<input type="checkbox"/>	better sleep	nlpNounGroup	1	1
<input type="checkbox"/>	dont sleep	nlpNounGroup	1	1
<input type="checkbox"/>	enough sleep	nlpNounGroup	1	1
<input type="checkbox"/>	excessive			

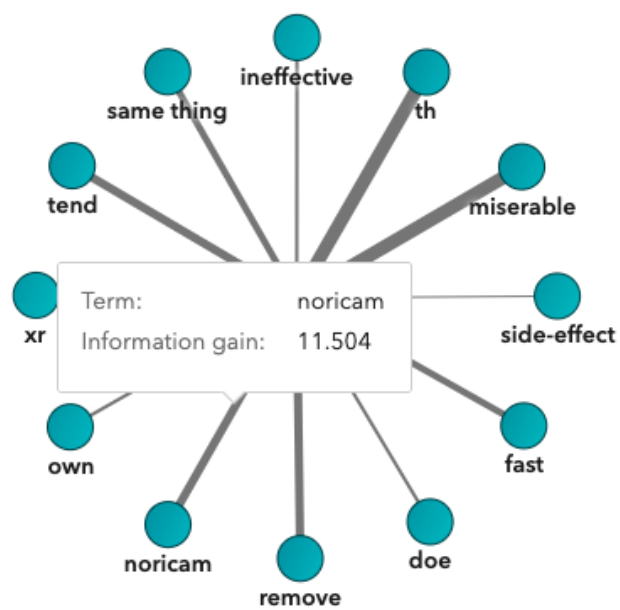
Documents

All (1414)
Matched (1 of 1414)

DrugReport

...th patient off **sleep-aids** if they are on them, asap! The reason is sandoz-bupropion or noricam or panaxil e totally ineffective on them. As soon as they can sleep four hours or more regularly on their own, they need to for over a year. There is not any problem with a higher suggested does as long as the patient is monitored ev

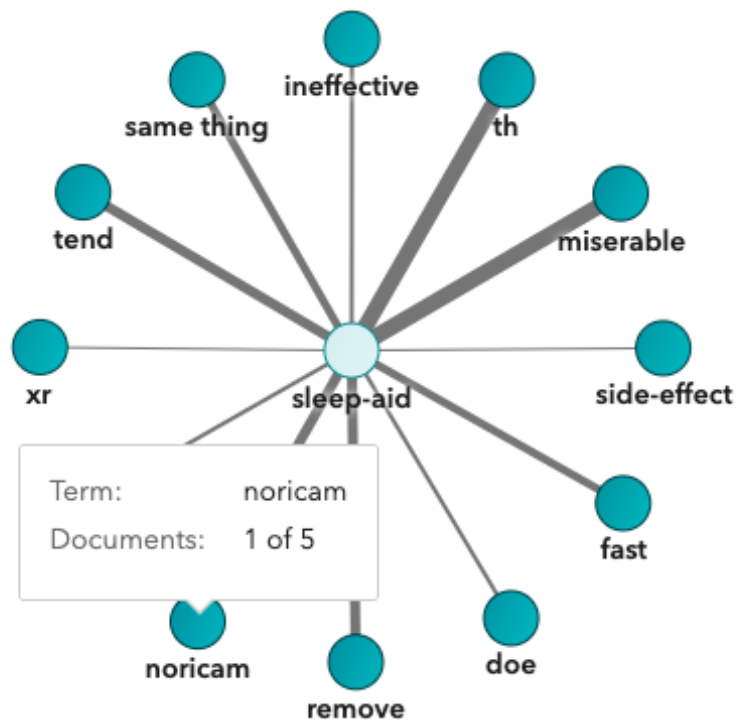
There is only one ‘sleep-aid’ noun in 1414 documents.



The Information gain between sleep-aid (Noun) and fortifex is 11.504.



## Term Map for "sleep-aid"



So, there are total norcam **medications** out of those 1 is **associated with sleep-aid (Noun)**.

- **dont sleep (nlpNounGroup)**

Model Studio - Build Models

Big\_Data\_Assignment3\_Drug\_Reports > Text Parsing - Manage Terms

Kept Terms (37)

	Term ^	Role	Documents	Frequency ▾	
<input type="checkbox"/>	▶ sleep issue	nlpNounGroup	2	2	
<input type="checkbox"/>	▶ sleep-aid	N	1	2	
<input type="checkbox"/>	better sleep	nlpNounGroup	1	1	
<input checked="" type="checkbox"/>	dont sleep	nlpNounGroup	1	1	
<input type="checkbox"/>	enough sleep	nlpNounGroup	1	1	
<input type="checkbox"/>	excessive sleepines	nlpNounGroup	1	1	
<input type="checkbox"/>	longer sleep	nlpNounGroup	1	1	

Documents

All (1414) Matched (1 of 1414)

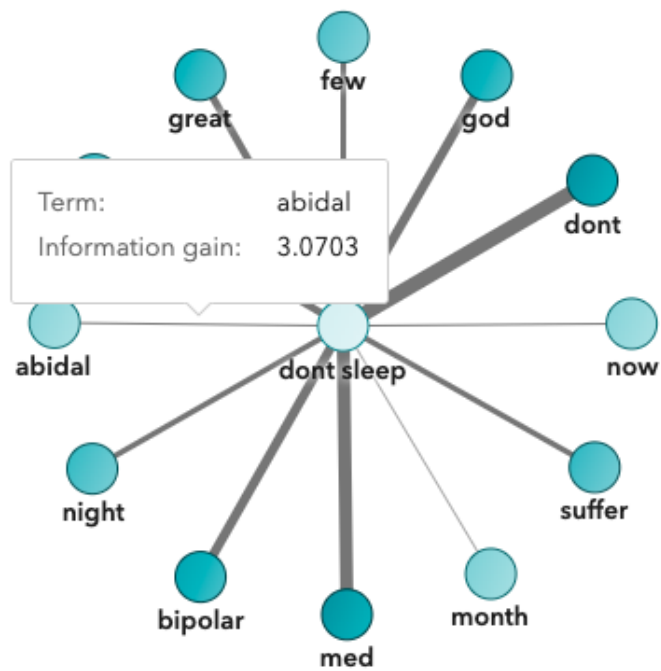
Search

DrugReport

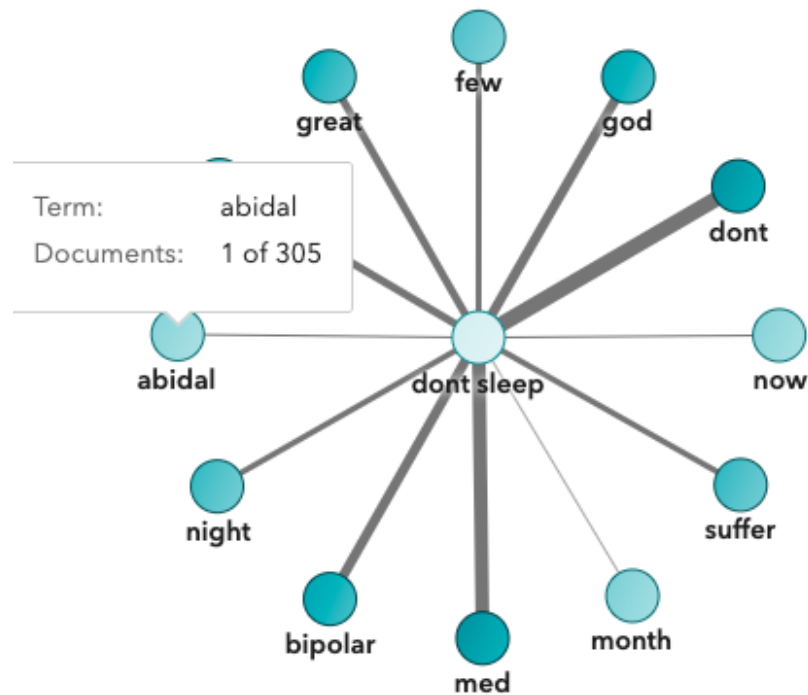
...NIGHT SO I DONT SLEEP IN THE DAY

There is only one ‘dont sleep’ noun in 1414 documents.

> Term Map for "dont sleep"



The Information gain between dont sleep (Noun) and abidal is 3.0703.



So, there are total 305 fortifex **medications** out of those 1 is **associated with dont sleep (Noun)**.

- **mysleep (Noun)**

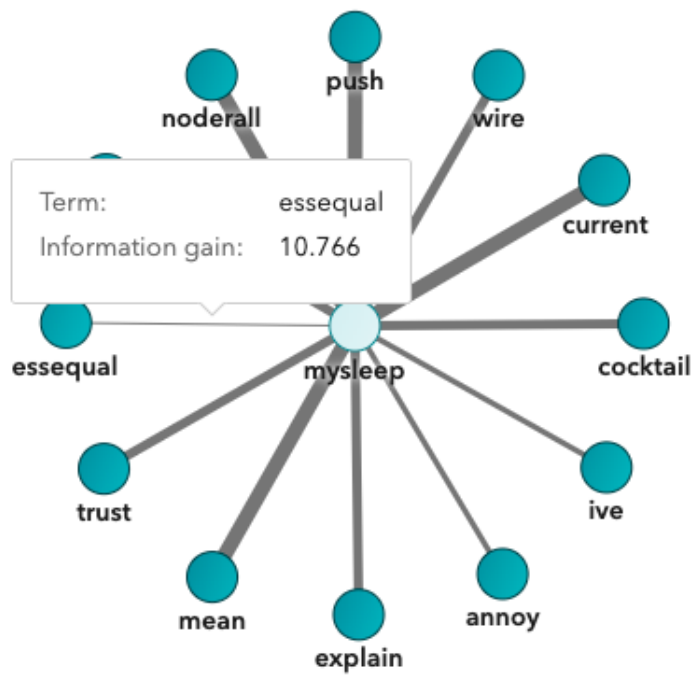
Kept Terms (44)

	Term ^	Role	
<input type="checkbox"/>	eough sleep	nlpNounGroup	
<input type="checkbox"/>	excessive sleepines	nlpNounGroup	
<input type="checkbox"/>	longer sleep	nlpNounGroup	
<input checked="" type="checkbox"/>	mysleep	N	
<input type="checkbox"/>	rx sleep	nlpNounGroup	
<input type="checkbox"/>	shakiness cant sleep	nlpNounGroup	

#### Documents

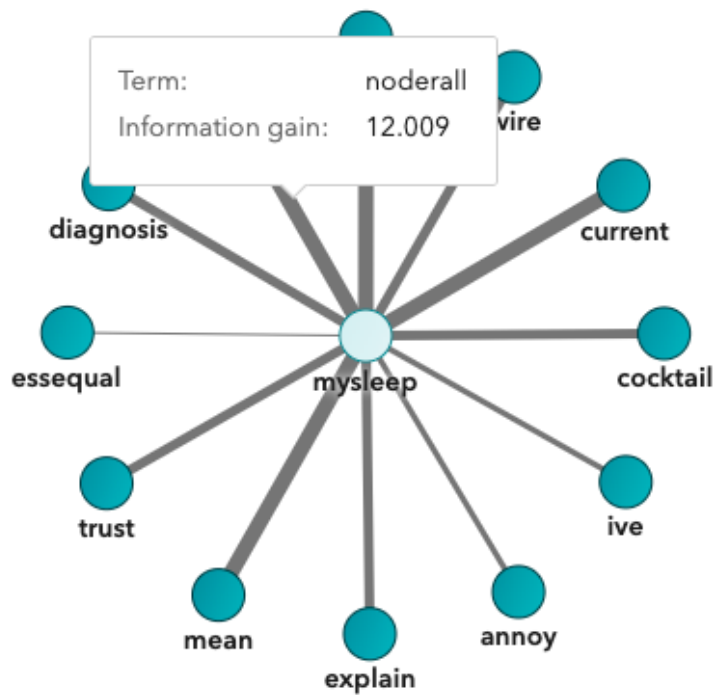
There is only one 'mysleep' noun in 1414 documents.

> Term Map for "mysleep"



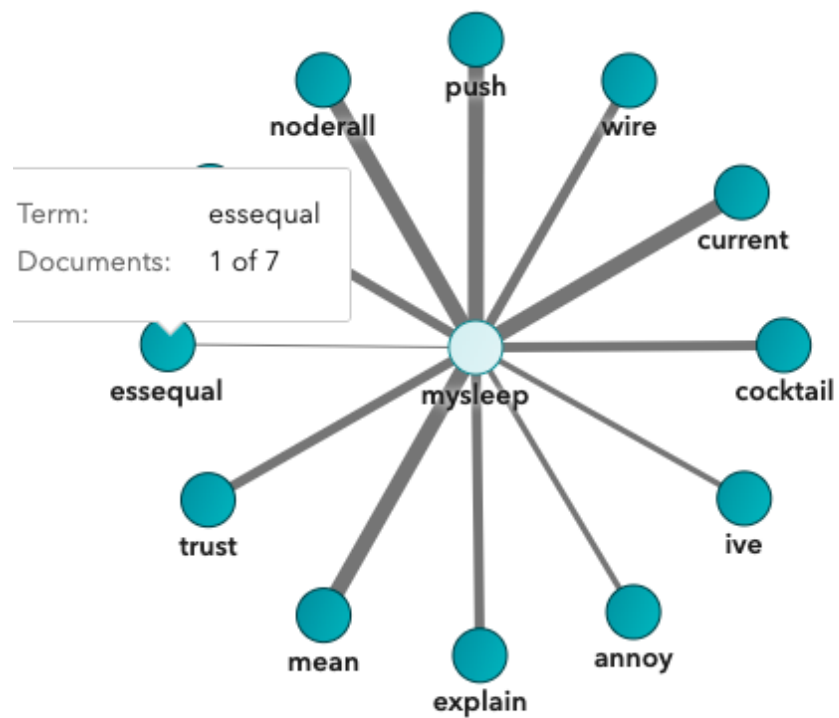
The Information gain between mysleep (Noun) and essequa is 10.766.

## Term Map for "mysleep"



The Information gain between mysleep (Noun) and noderall is 12.009.

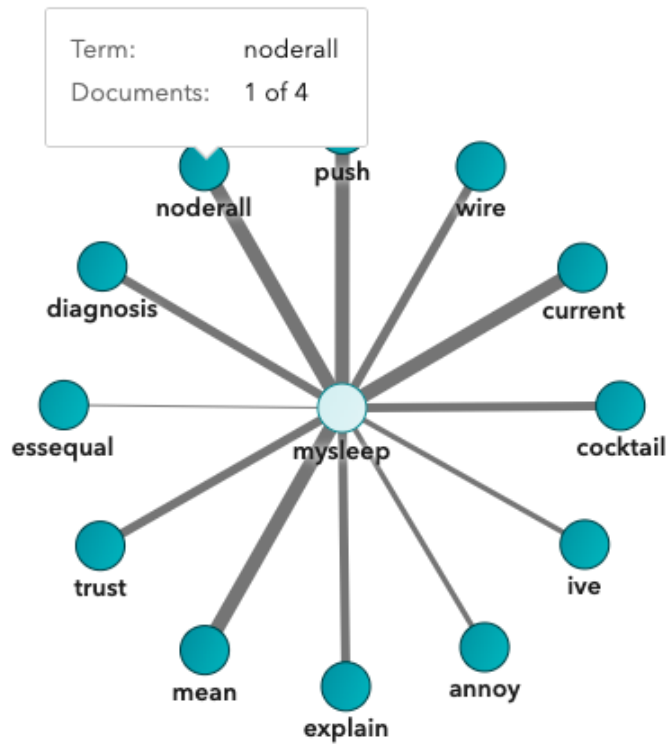
s > Term Map for "mysleep"



So, there are total 7 essequal **medications** out of those 1 is **associated with mysleep (Noun)**.



> Term Map for "mysleep"



So, there are total 4 noderall **medications** out of those 1 is **associated with** **mysleep (Noun)**.

- **sleepwalk (Verb)**

Kept Terms (37)

	Term ^	Role	Documents	Frequency ▾
<input type="checkbox"/>	sleeping pattern	nlpNounGroup	1	1
<input type="checkbox"/>	▸ sleeping tablet	nlpNounGroup	1	1
<input type="checkbox"/>	sleepingthe	N	1	1
<input type="checkbox"/>	sleepingthe day	nlpNounGroup	1	1
<input checked="" type="checkbox"/>	▸ sleepwalk	V	1	1
<input type="checkbox"/>	sleepwalking	N	1	1

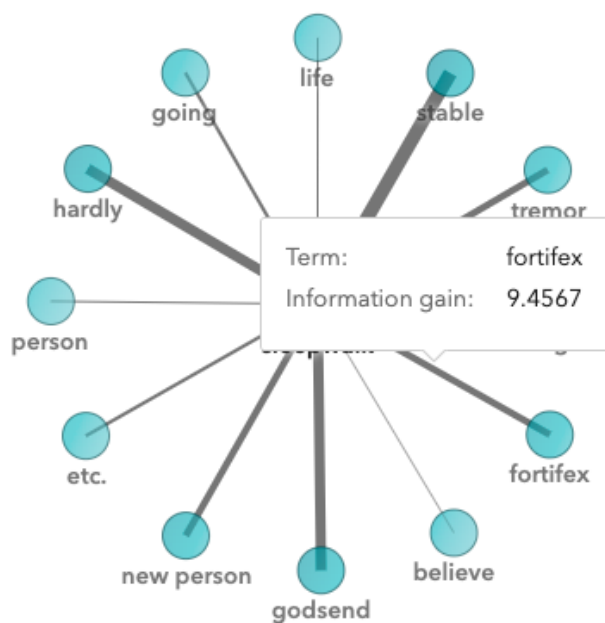
Documents

All (1414) Matched

DrugReport

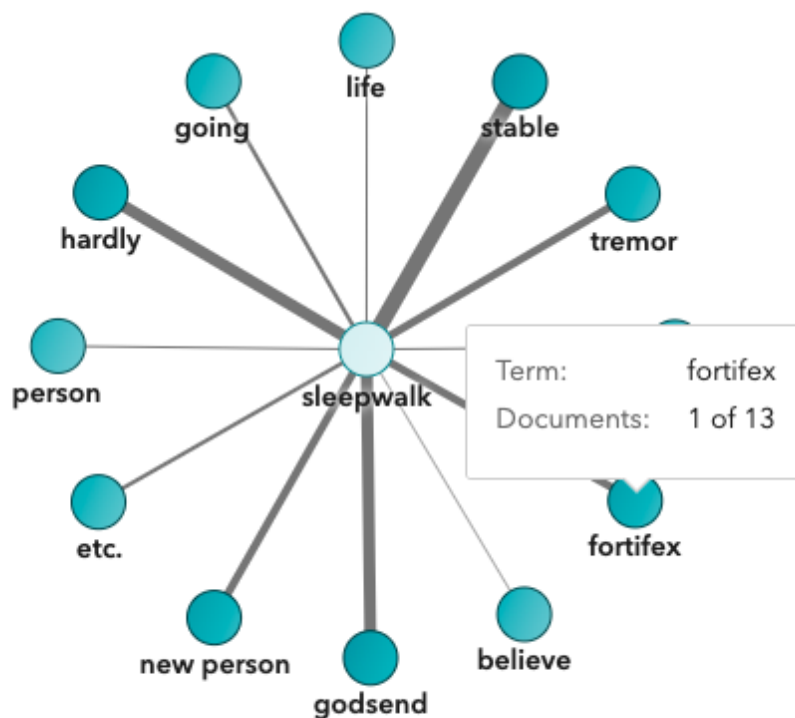
There is only one 'sleepwalk' verb in 1414 documents.

> Term Map for "sleepwalk"









The Information gain between sleepwalk (Verb) and fortifex is 9.4567.

#### Term Map for "sleepwalk"




So, there are total 13 fortifex **medications** out of those 1 is **associated with** sleepwalk (Verb).

- sleepwalking (Noun)

Kept Terms (37)       

	Term ^	Role	Documents	Frequency ▼
<input type="checkbox"/>	sleepingthe	N	1	1
<input type="checkbox"/>	sleepingthe day	nlpNounGroup	1	1
<input type="checkbox"/>	▷ sleepwalk	V	1	1
<input checked="" type="checkbox"/>	sleepwalking	N	1	1
<input type="checkbox"/>	strange sleep	nlpNounGroup	1	1
<input type="checkbox"/>	tea first night couldnt sleep	nlpNounGroup	1	1

Documents

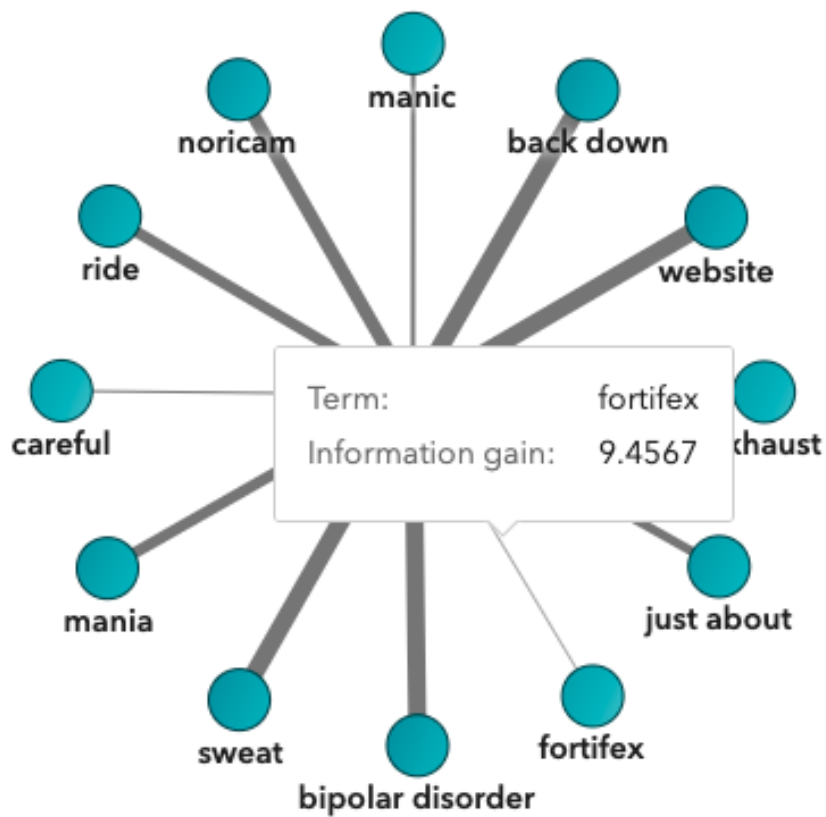


**DrugReport**

causing extreme anger, to the point that my family has become afraid of me. Doing things i would have consi  
out of someone. Enough to the point that it scares me. But my doctor at this time refuses to take me off this m

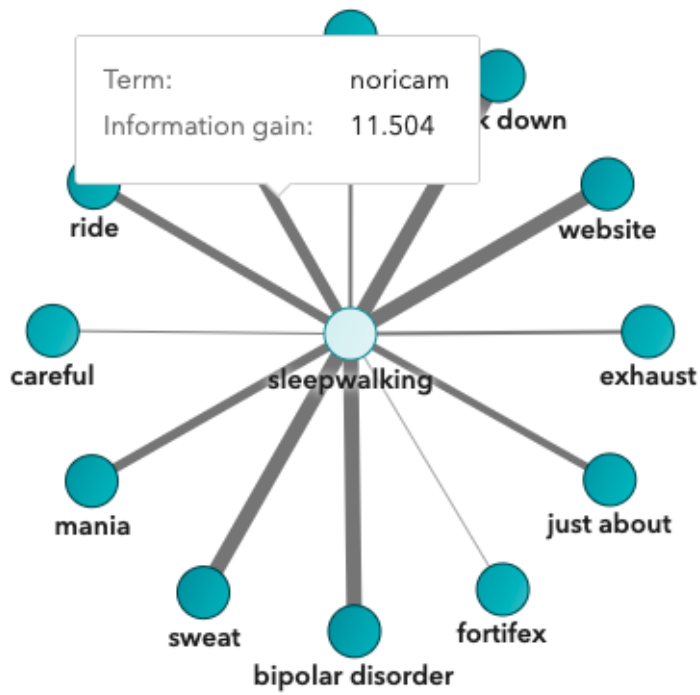
There is only one 'sleepwalking' noun in 1414 documents.

## Term Map for "sleepwalking"



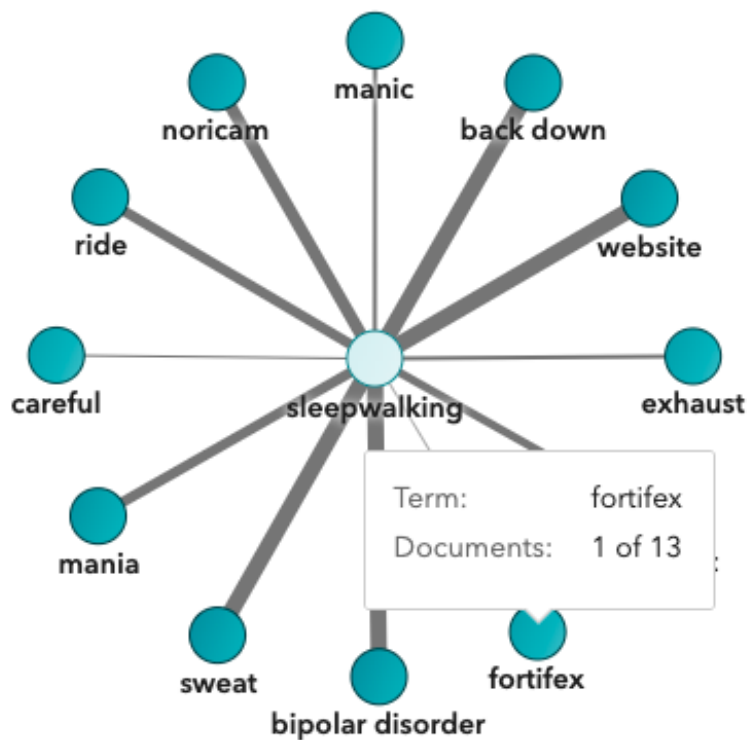
The Information gain between sleepwalking (Noun) and fortifex is 9.4567.

> Term Map for "sleepwalking"



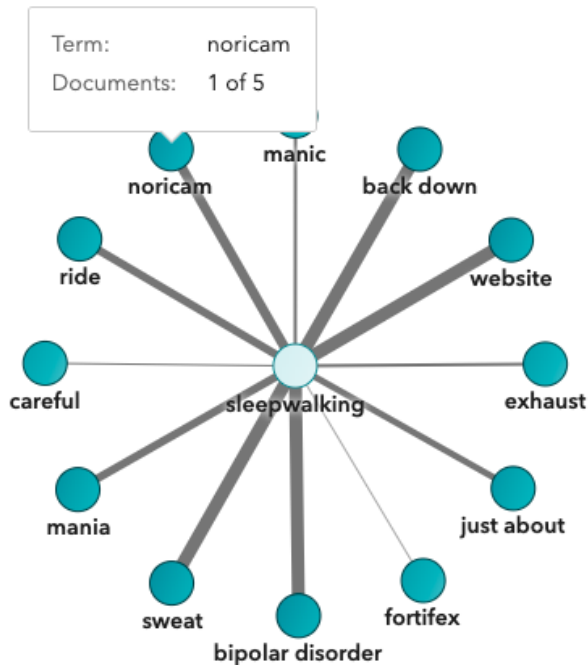
The Information gain between sleepwalking (Noun) and norcam is 11.504.

## Term Map for "sleepwalking"



So, there are total 13 fortifex **medications** out of those 1 is **associated with sleepwalking (Noun)**.

Term Map for "sleepwalking"



So, there are total 5 noricam **medications** out of those 1 is **associated with sleepwalking (Noun)**

Therefore, the **medications** that are **associated with sleep issues** are **Fortifex, Noricam, Noderall, Essequal, Abidal, and Perinol**.

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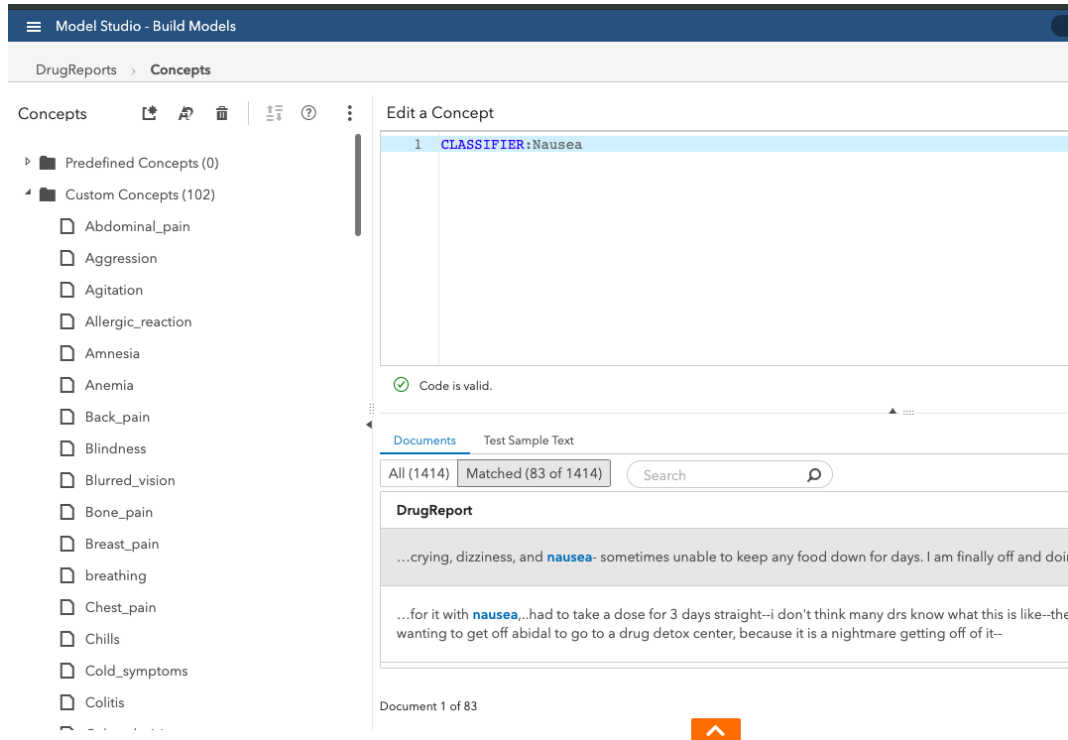
#### Task 4 - What are the most common concerns expressed?

To complete this task, you need to determine the main concerns expressed in the posts. For this task you are free to use any tools or combination of tools. Make sure that you explain what tools you are using and how, and how to read the charts that you produce.



For Task 4, I used only SAS Viya for Learners.

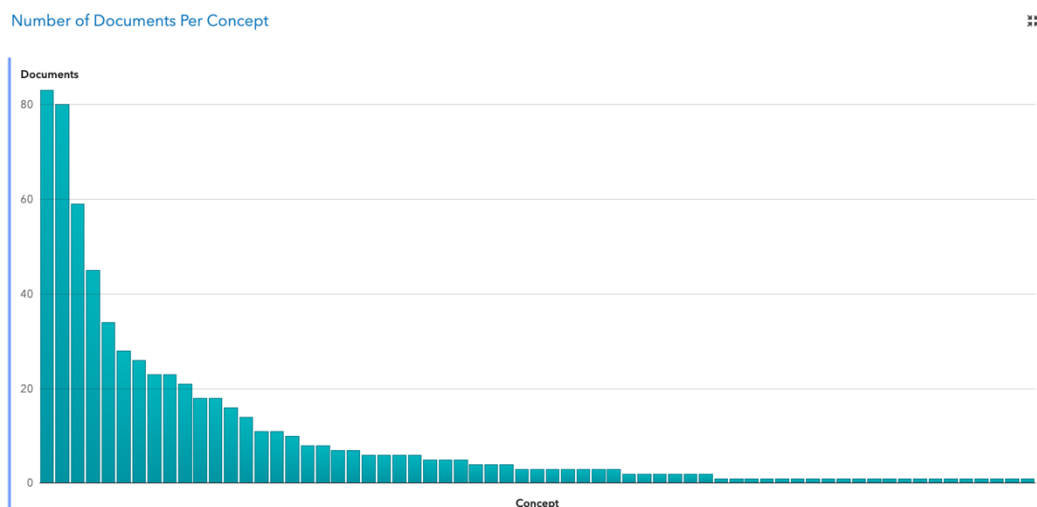
So, I created 102 different concepts ( Abdominal pain, Aggression, Agitation, Allergic reaction, Amnesia, and so on ) as mentioned in SideEffects text file. Then, pasted the required classifiers in all the 102 concepts from the given SideEffects text file. In addition, I validated the rules and ran node for every concept.



The screenshot displays the SAS Viya Model Studio interface. The top navigation bar shows 'Model Studio - Build Models'. Below it, the 'DrugReports' and 'Concepts' tabs are visible. The left sidebar lists 'Predefined Concepts (0)' and 'Custom Concepts (102)'. The 'Custom Concepts' list includes: Abdominal\_pain, Aggression, Agitation, Allergic\_reaction, Amnesia, Anemia, Back\_pain, Blindness, Blurred\_vision, Bone\_pain, Breast\_pain, breathing, Chest\_pain, Chills, Cold\_symptoms, Colitis, and others. The main panel is titled 'Edit a Concept' and shows a concept named '1 CLASSIFIER:Nausea'. Below the concept name, a green checkmark indicates 'Code is valid.'. The 'Documents' tab is active, showing a search bar and a list of documents. The search results show 'All (1414)' and 'Matched (83 of 1414)'. A sample document snippet is displayed below the search results, showing text related to 'nausea'.

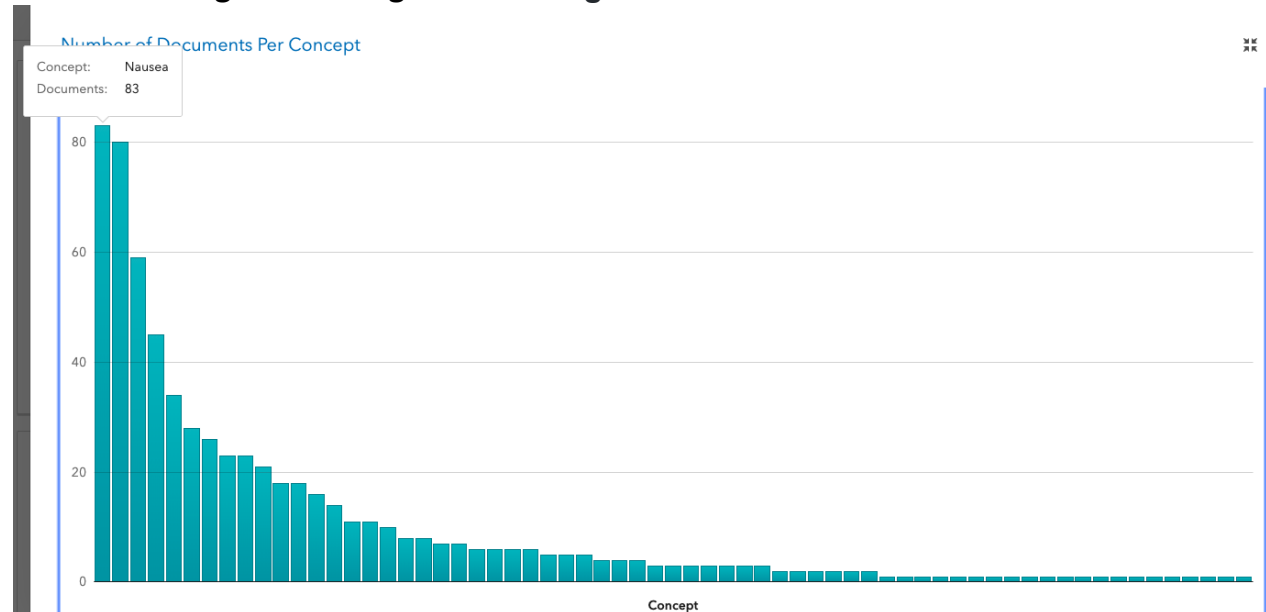
Then, we will go to *Pipeline* again and *run* Concepts. Then, select *Results* for Concepts.

Finally, we will get the bar graph representing the count for Abdominal pain, Aggression, Agitation, Allergic reaction, Amnesia, and so on.

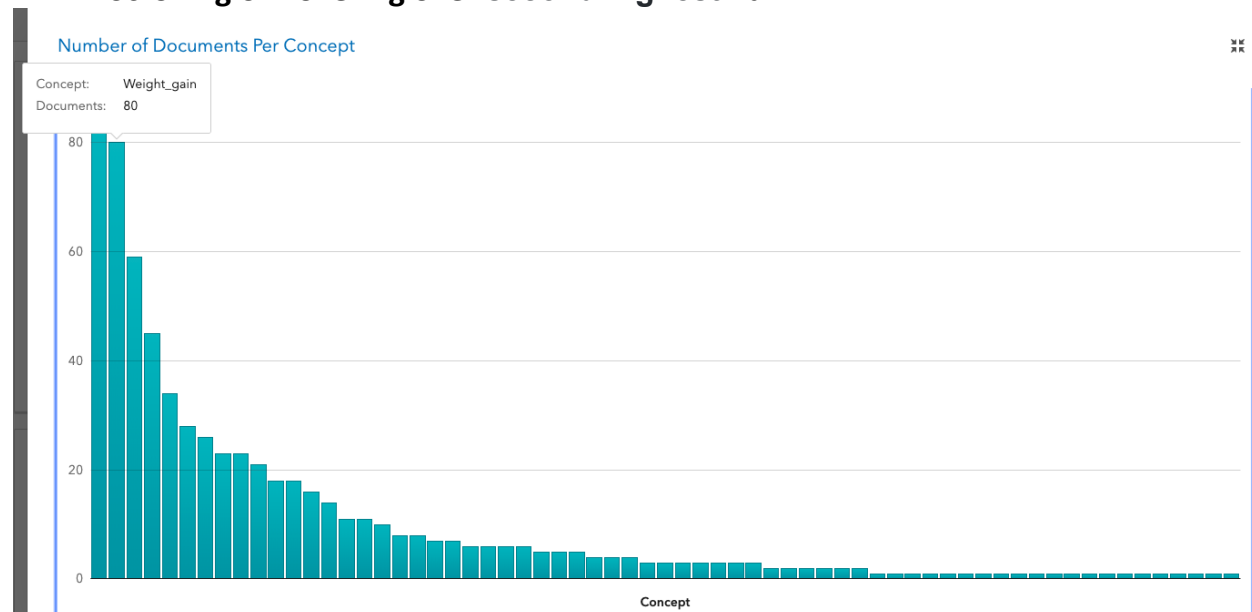


By scrolling or hovering over the different bars we can get the count of each element i.e. Abdominal pain, Aggression, Agitation, Allergic reaction, Amnesia, and so on.

- **Scrolling or hovering over first highest Bar**

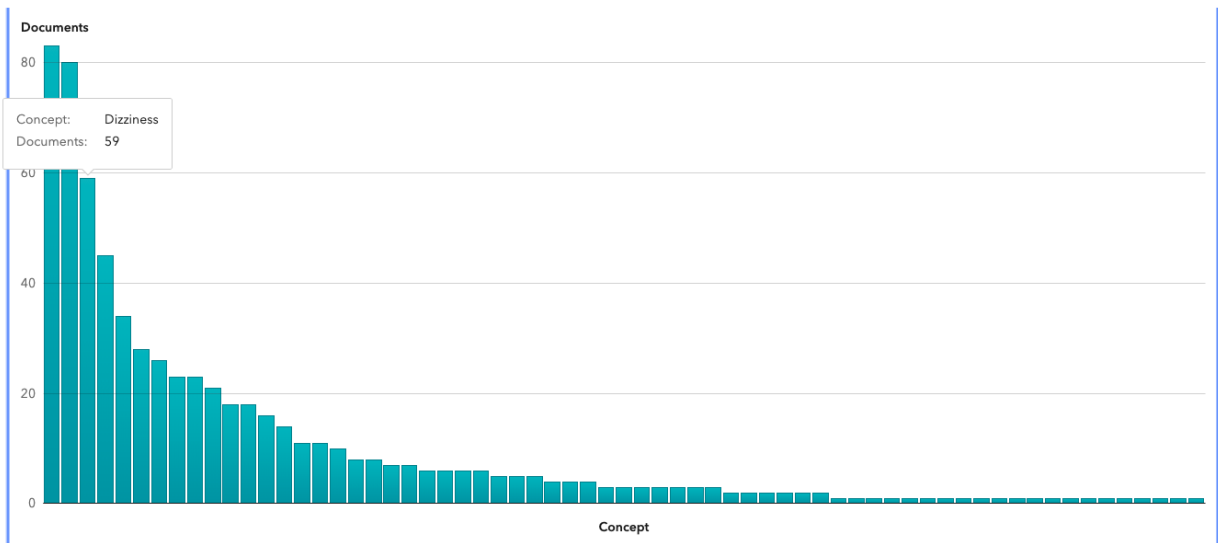


- **Scrolling or hovering over second highest Bar**



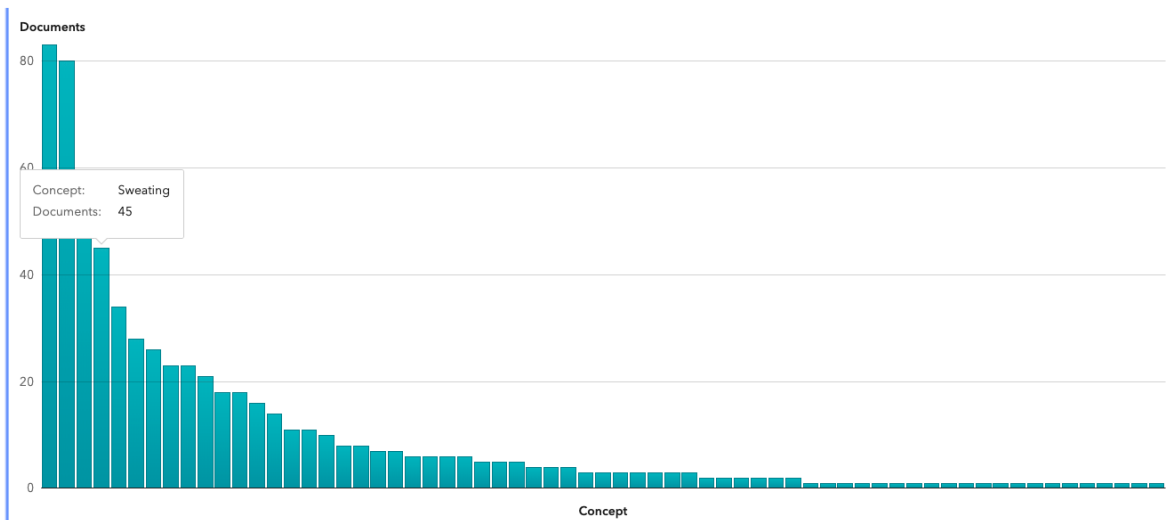
- **Scrolling or hovering over third highest Bar**

Number of Documents Per Concept

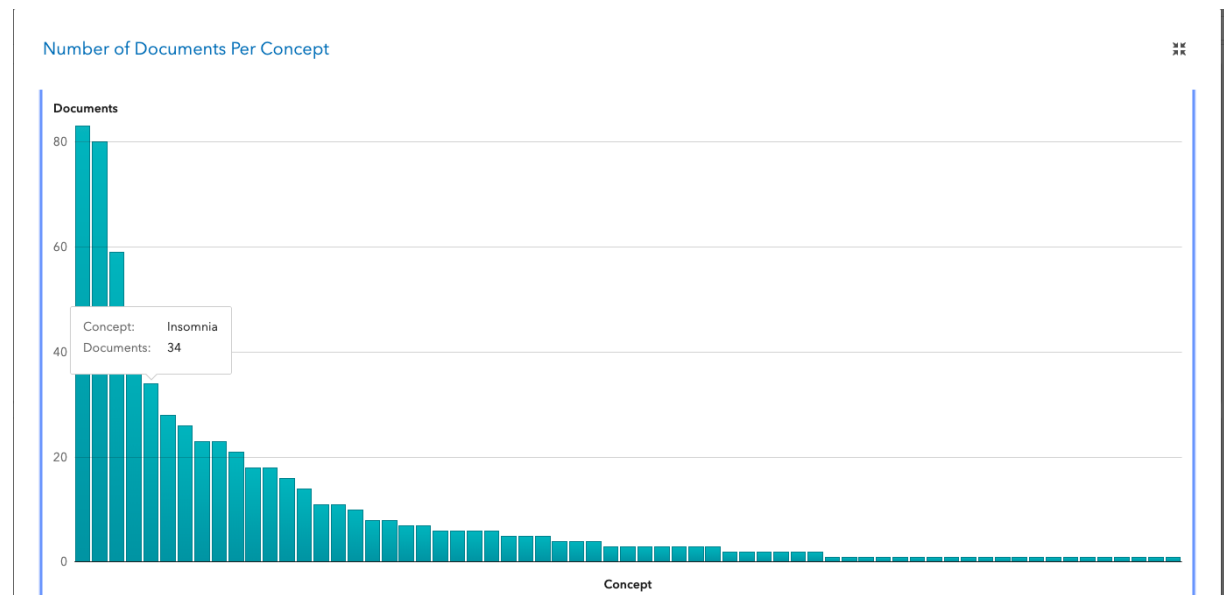


- Scrolling or hovering over fourth highest Bar

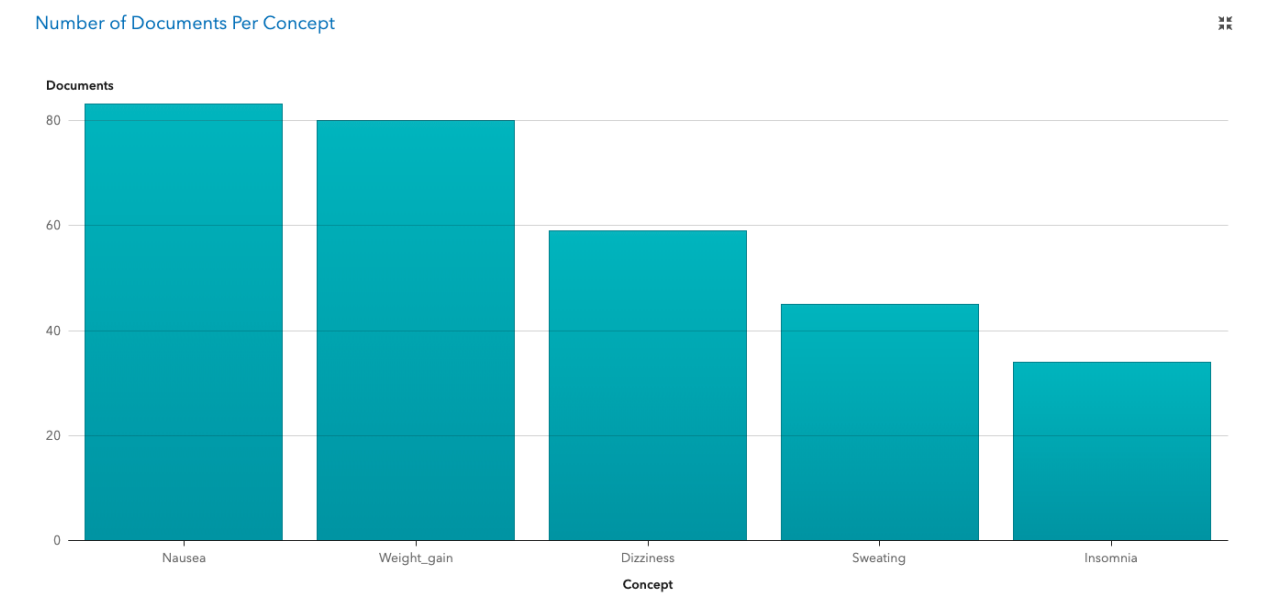
Number of Documents Per Concept



- Scrolling or hovering over fifth highest Bar

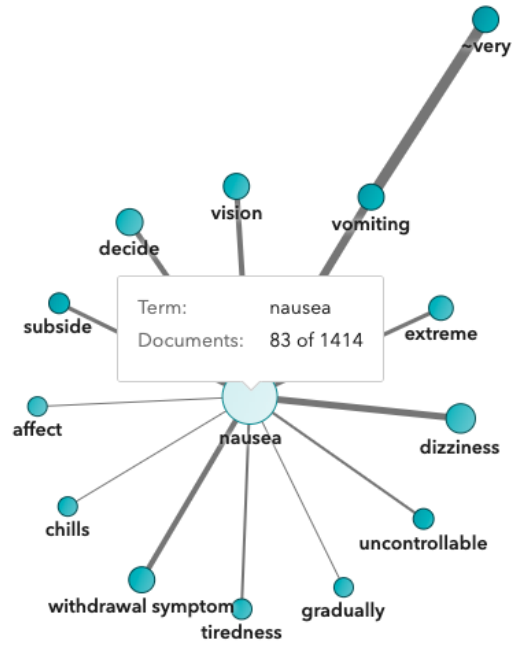


A separate Bar chart for those 5 most common concerns



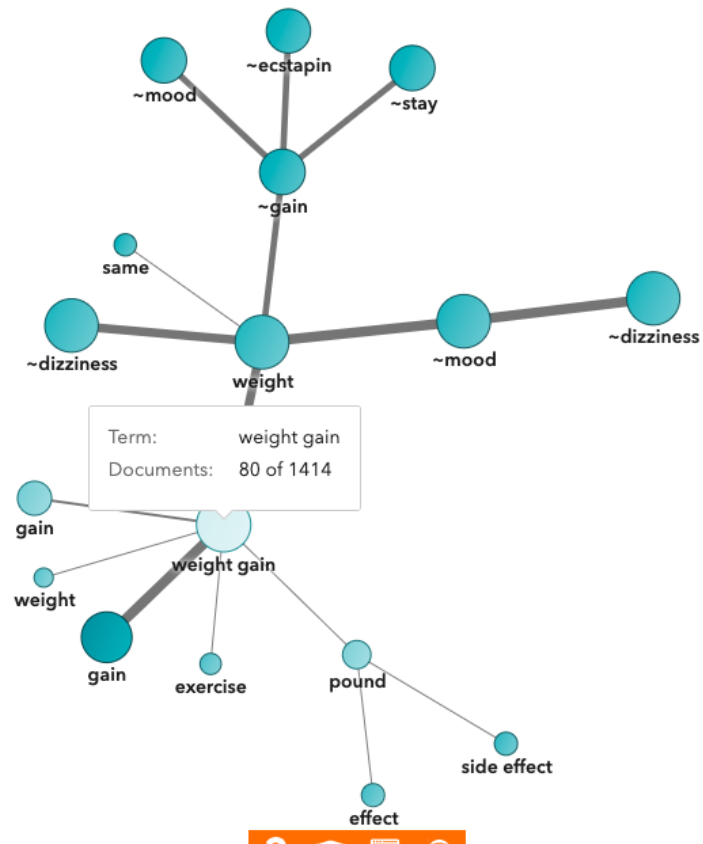
Term map for first highest common concern i.e. Nausea

> Term Map for "nausea"



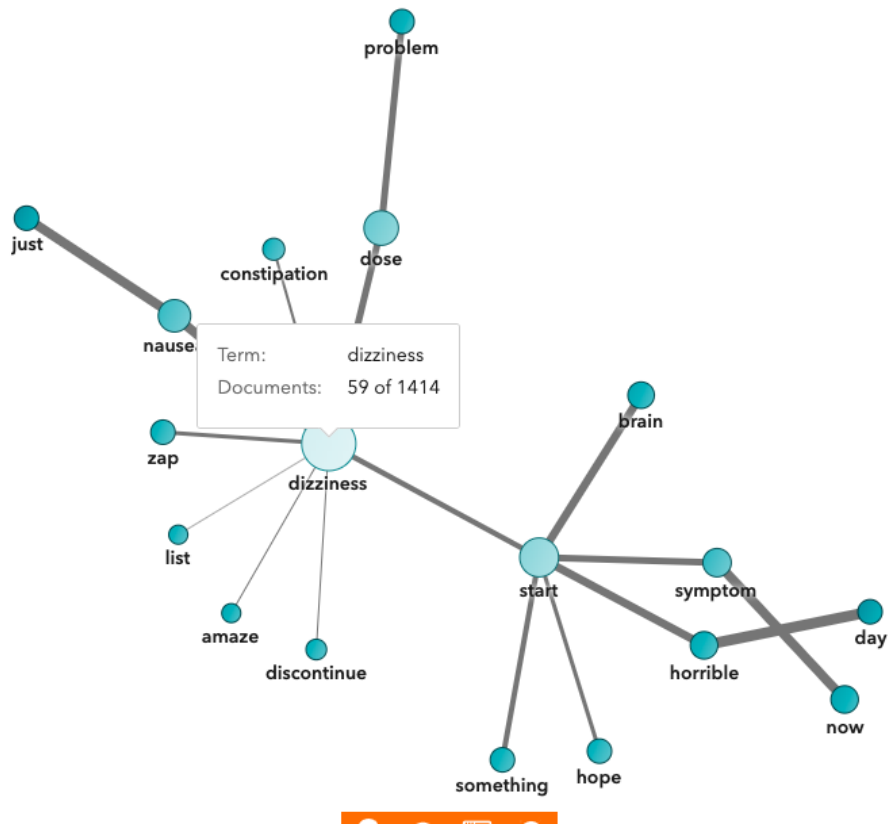
Term map for second highest common concern i.e. Weight gain

### Term Map for "weight gain"



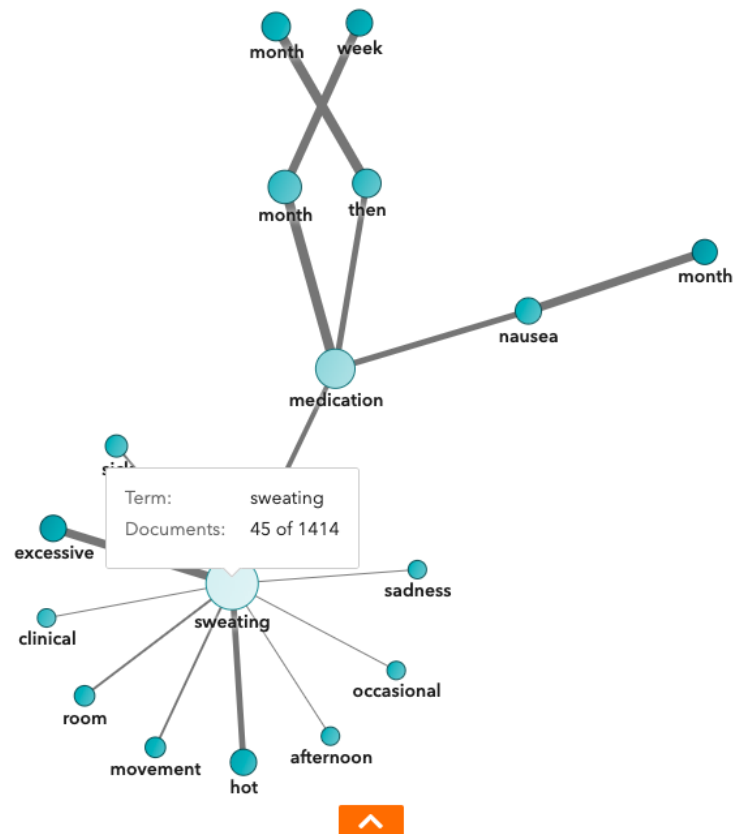
Term map for third highest common concern i.e. Dizziness

# Term Map for "dizziness"



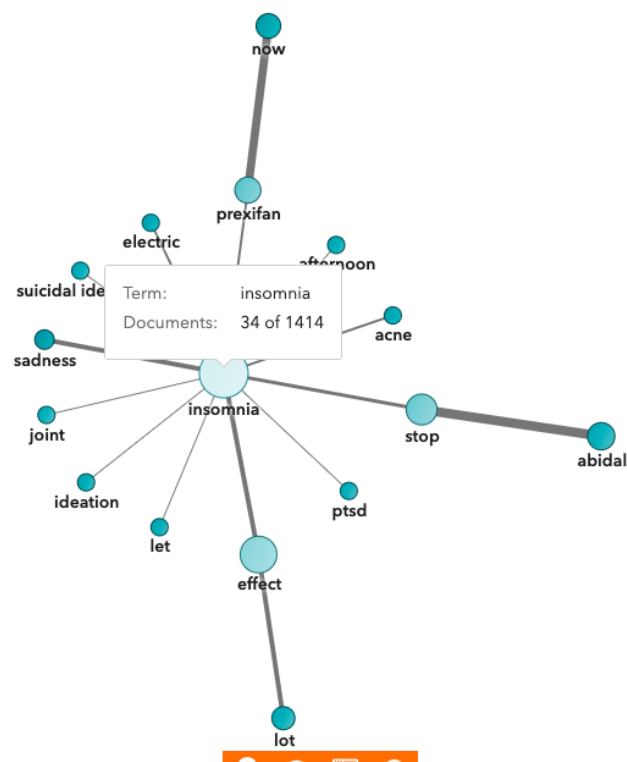
Term map for fourth highest common concern i.e. Sweating

Term Map for "sweating"



Term map for fifth highest common concern i.e. Insomnia

Term Map for "insomnia"





Therefore, the **first most common concern** is **Nausea** with count **83**, the **second most common concern** is **Weight gain** with count **80**, the **third most common concern** is **Dizziness** with count **59**, the **fourth most common concern** is **Sweating** with count **45**, the **fifth most common concern** is **Insomnia** with count **34**.

XX

### Task 5 (5 marks) - Provide useful additional information.

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This final task is open. Provide additional charts that would help the analyst find additional useful information about drug effects on patients. For this task, in addition to explaining how the charts were produced and how to read them, it is important that you explain how the information is useful.

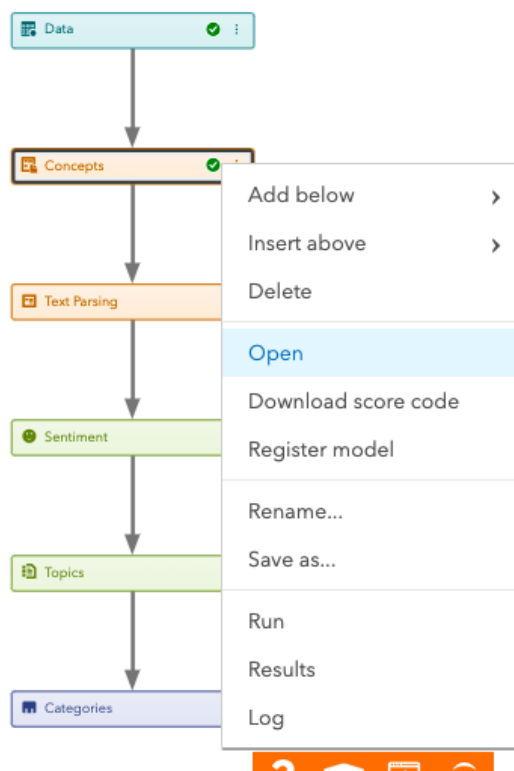
For Task 5, I used only SAS Viya for Learners.

Here, I will give a more brief information of Task 3. In the solution of Task 3, I found the medications that are associated with sleep issues i.e. sleep(Noun), sleep(Verb), sleep issue(Noun), sleep-aid(Noun), dont sleep(Noun), etc. But, there can be other classifiers also which indirectly mean sleep or any other sleeping issue. So, Dizziness and Insomnia are the two classifiers other than Sleeplessness, which are also related to sleeping issues.

From Task 3, we got to know that **medications** that are **associated with sleep issues** are **Fortifex, Noricam, Noderall, Essequal, Abidal, and Perinol**.

Therefore, now I will also add Dizziness and Insomnia classifiers and call a concept from other.

First, I opened the Concepts Node.



Then, made these Concepts.

The 5 SleepEffect concepts are describing the predicate rule, which will find the association between the given medicine (name of the particular medicine that we will pass) and SleepAssociation (concept containing the classifiers of Dizziness, Insomnia, & Sleeplessness).

For example, as we can see below, Abidal medication is passed in the Predicate Rule with SleepAssociation.

The screenshot shows the 'Model Studio - Build Models' interface. The left sidebar displays a tree of concepts under 'aacc > Concepts'. The 'Custom Concepts (11)' folder is expanded, showing 'AbidalSleepEffect' selected. The main area is titled 'Edit a Concept' and shows a single rule: `1 PREDICATE_RULE:(med, sleep):(SENT,"_med{Abidal}","_sleep{SleepAssociation}")`. Below the rule, a green checkmark indicates 'Code is valid.'. The bottom section, titled 'Documents', shows a search bar and a list of documents. The first document, 'DrugReport', contains the text: 'This medication made me gain 40 pounds it has been 2 years and I have only lost 10 pounds. Beware and watch your weight.' The second document contains the text: 'Prexifan was added to my ecstapin(225mg) due to unrelenting depression.I had lost my sisiter mom within 8 months and although I had b antidepressant for a long time before I grieved but still couldn't get over the depression. Within 3-54 daysboth I and my husband noticed

As we can see below, Dizziness, Insomnia, & Sleeplessness classifiers are passed in SleepAssociation concept.

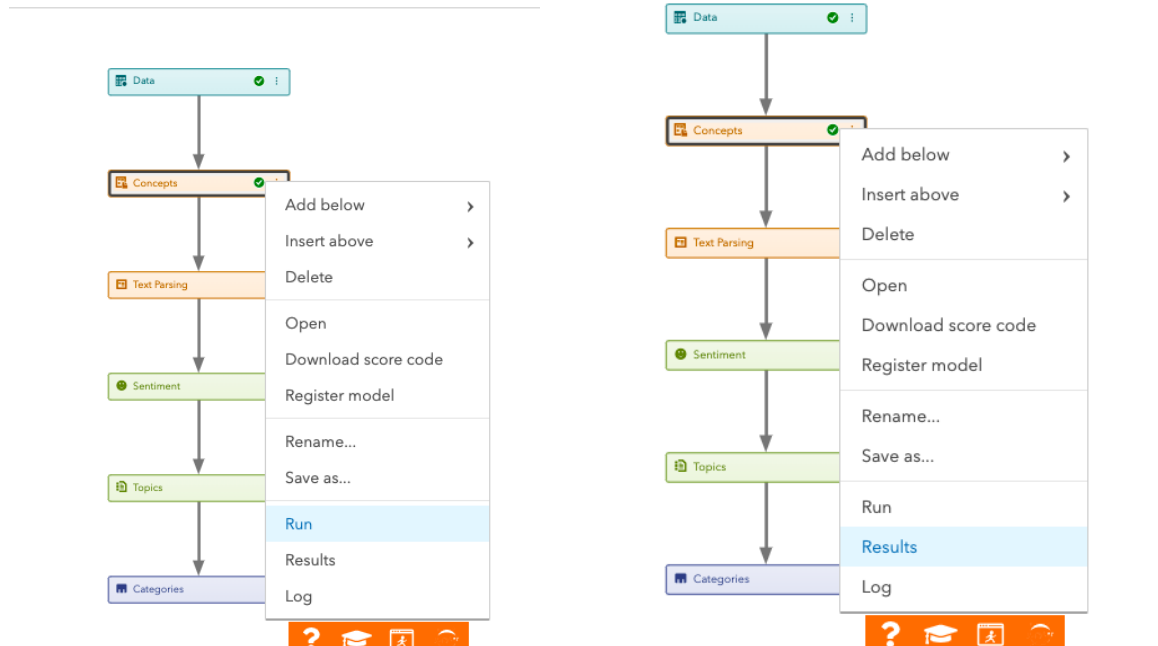
The screenshot shows the 'Model Studio - Build Models' interface. The left sidebar displays a tree of concepts under 'aacc > Concepts'. The 'Custom Concepts (11)' folder is expanded, showing 'SleepAssociation' selected. The main area is titled 'Edit a Concept' and shows three rules: `1 CLASSIFIER:Dizziness`, `2 CLASSIFIER:Insomnia`, and `3 CLASSIFIER:Sleeplessness`. Below the rules, a green checkmark indicates 'Code is valid.'. The bottom section, titled 'Documents', shows a search bar and a list of documents. The first document, 'DrugReport', contains the text: 'This medication made me gain 40 pounds it has been 2 years and'. The second document contains the text: 'Prexifan was added to my ecstapin(225mg) due to unrelenting c

The 5 single medication named concepts are describing the classifiers for only that medication.

For example, as we can see below, Abidal medication's classifier is passed in the Abidal concept.

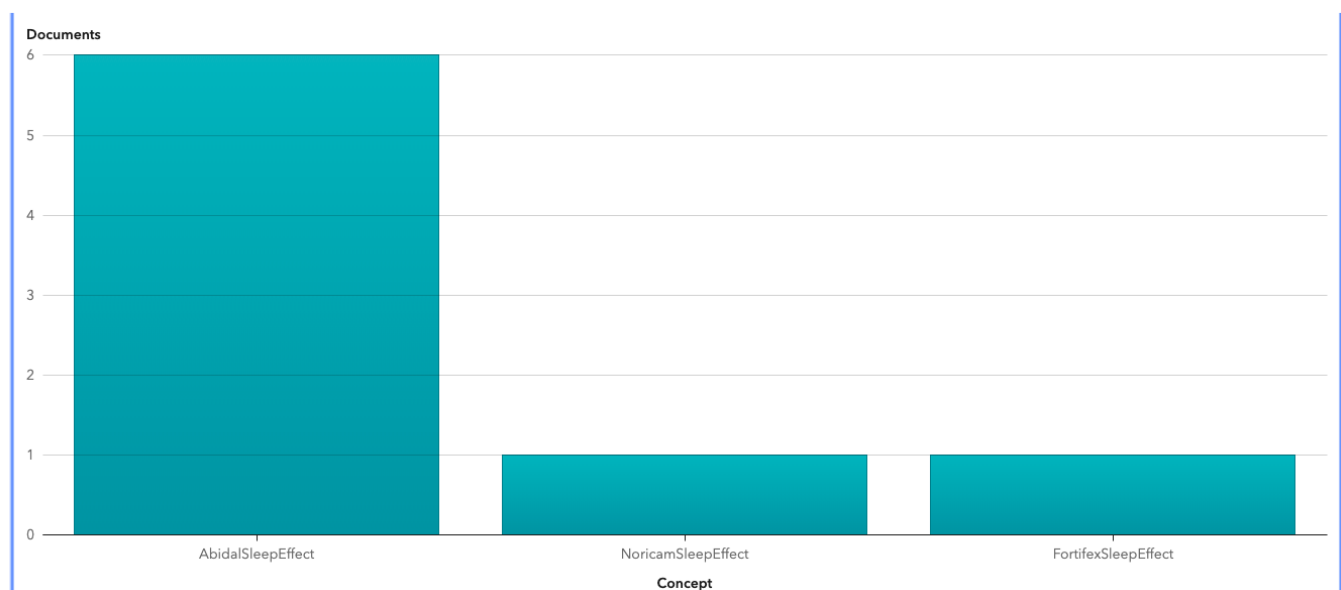
The screenshot displays the 'Model Studio - Build Models' interface. The breadcrumb navigation shows 'aacc > Concepts'. The left sidebar, titled 'Concepts', lists 'Predefined Concepts (0)' and 'Custom Concepts (11)'. Under 'Custom Concepts', several items are listed: 'AbidalSleepEffect', 'NoricamSleepEffect', 'FortifexSleepEffect', 'Abidal' (which is selected and highlighted), 'Noricam', 'Fortifex', 'SleepAssociation', 'NoderallSleepEffect', 'PerinolSleepEffect', 'Noderall', and 'Perinol'. The main area is titled 'Edit a Concept' and contains a table with one row: '1 CLASSIFIER:Abidal'. Below the table, a green checkmark indicates 'Code is valid.'. At the bottom, there are tabs for 'Documents' and 'Test Sample Text'. The 'Documents' tab is active, showing a list of 'All (1414)' documents, a 'Matched' filter, and a search bar. Below this, a 'DrugReport' section displays two sample text snippets: 'This medication made me gain 40 pounds it has been 2 years .' and 'Prexifan was added to my ecstapin(225mg) due to unrelenting '.

Now, we will Run and see the Results of this pipeline.

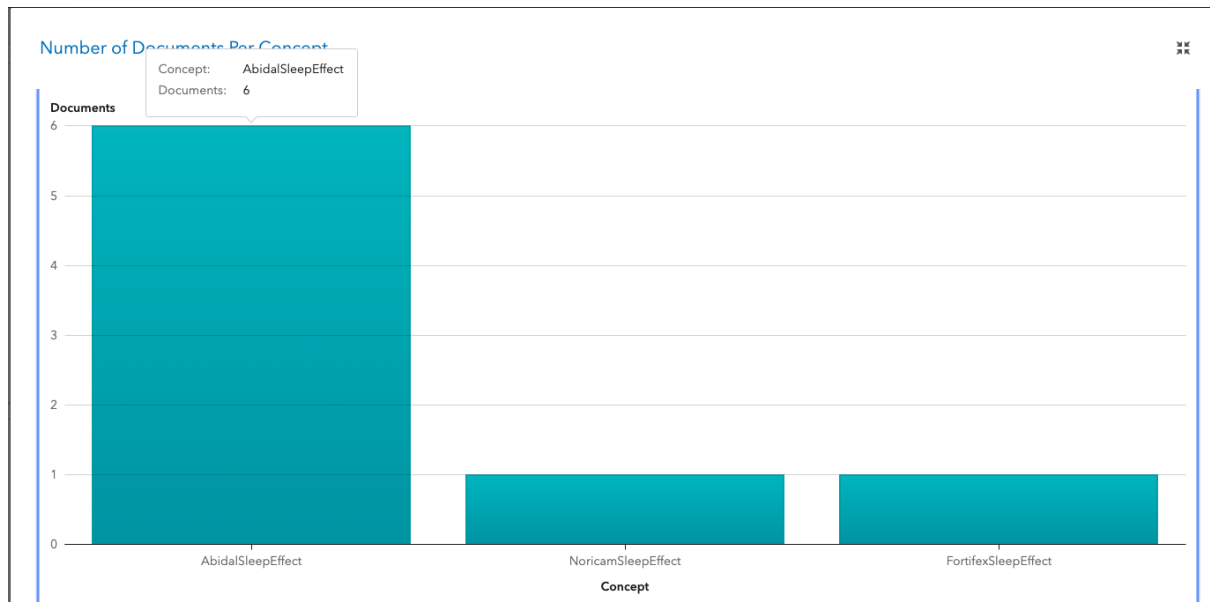


Finally, we will get the bar graph representing the count for AbidalSleepEffect, NoricamSleepEffect, & FortifexSleepEffect. By scrolling or hovering over the different bars we can get the count of each element i.e. AbidalSleepEffect, NoricamSleepEffect, & FortifexSleepEffect.

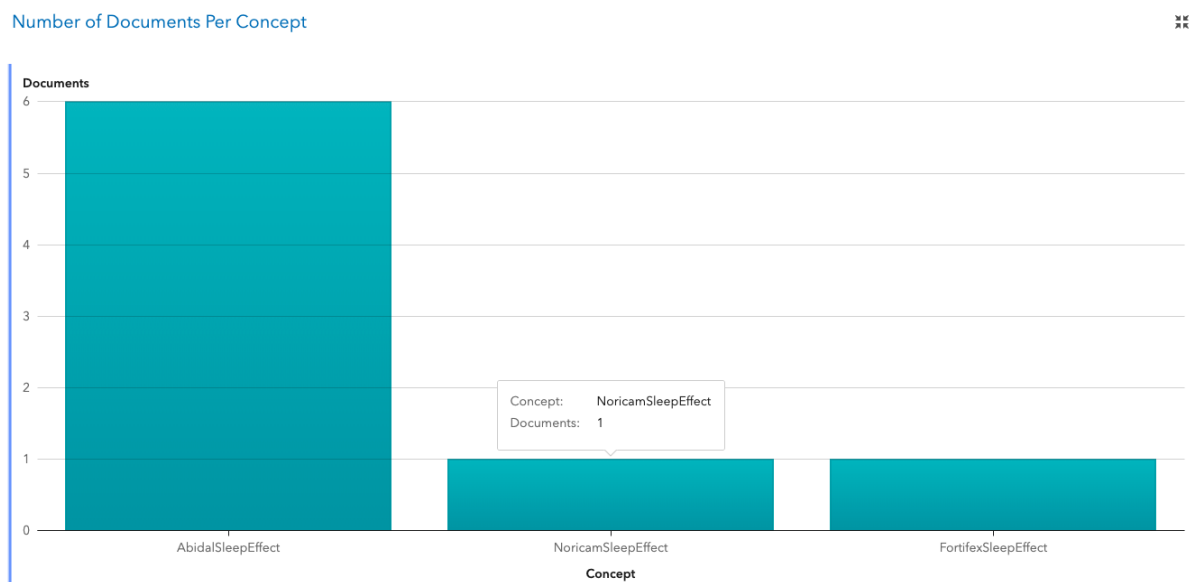
Number of Documents Per Concept



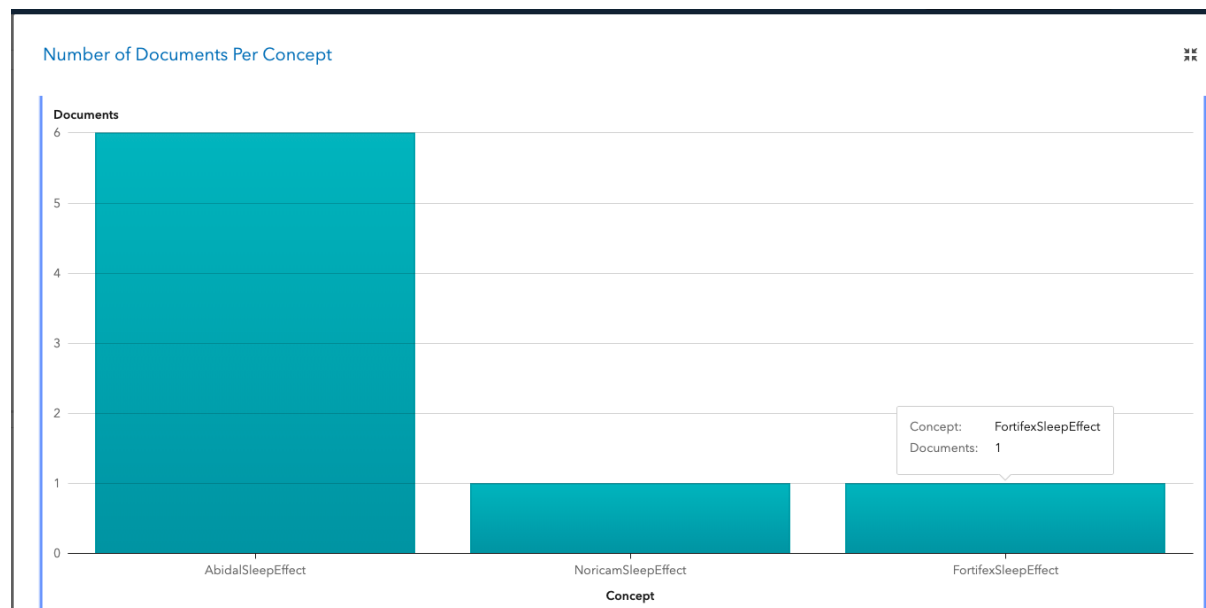
- **Scrolling or hovering over AbidalSleepEffect**



- **Scrolling or hovering over NoricamSleepEffect**



- **Scrolling or hovering over FortifexSleepEffect**



Therefore, AbidalSleepEffect has 6 count, NoricamSleepEffect has 1 count, & FortifexSleepEffect has 1 count. These counts are representing the association of a particular medication with Sleeplessness, Dizziness and Insomnia classifiers.