# Ontology of Mental Health

## Business Need

A semantic map of all diseases, symptoms and terminology in mental health helps provide foundation for “intelligent” applications: -

* Auto-tagging of prescriptions and clinical notes in counseling/psychiatry
* Classification of mental health articles for information retrieval
* Organizing and Querying mental health Q&A database for information retrieval
* Auto-tagging social media, news articles in mental health
* Chat-based psychological counseling – text analysis
* Expand Differential Diagnosis scope to mental health in CDSS

We have similar medical knowledge-base and ontology for drugs and SNOMED-CT that forms base for multiple APIs and services. With mental health, we can similarly expand range of offerings.

## Approach

Prominent encyclopedia in psychological disciplines, with articles and related information on each term in psychology, psychiatry and mental health provide the knowledgebase. Using NLP and Ontology engineering, we aim to build a structured database, from this unstructured text, in line with ICD and DSM nomenclature, and use ontological principles to make an “intelligent network” of such terms.

## Source data

1. DSM (Diagnostic and statistical Manual of Mental Disorders) -5
2. ICD-9 and ICD-10
3. Encyclopedia of Mental Health
4. Encyclopedia of Psychology

## Team Composition

Geetamruta- Data Scientist

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Niharika – intern

