

Visualization Prototype Development to Demonstrate the Breadth and Depth of Electronic Health Record Data

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Problem: The UW Institute of Translational Health Sciences (ITHS) Data QUEST team needs improved data visualizations of their electronic health record data (EHR). The goal is to facilitate website users' data exploration.

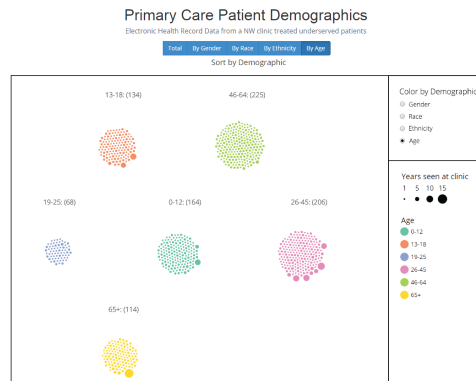
Motivation: Our tools will help researchers have a better understanding regarding the types of data and characteristics available to them.

Approach: Deliver three unique rapidly produced prototypes to the Data QUEST team for evaluation.

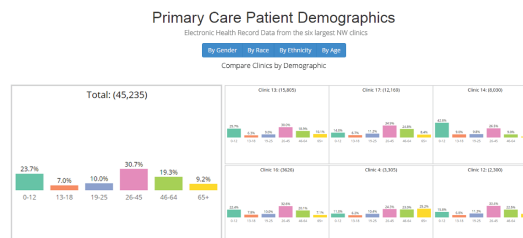
Future work: The prototypes will be improved and eventually incorporated into the team's website. Additional prototyping can be done on different forms of EHR data not already obtained from ITHS.

Gender By Age		Gender By Year					Total
Gender	Ages 0-12	Ages 13-18	Ages 19-25	Ages 26-45	Ages 46-64	Ages 65 plus	
Female	5,330 (8.88%)	2,346 (3.91%)	4,969 (8.28%)	9,916 (16.52%)	7,615 (12.68%)	4,570 (7.61%)	34,746 (57.88%)
Male	5,693 (9.48%)	2,151 (3.58%)	2,230 (3.71%)	6,412 (10.68%)	5,675 (9.45%)	3,119 (5.20%)	25,280 (42.11%)
Unknown	2 (0.01%)	1 (0.01%)	0 (0.01%)	4 (0.01%)	1 (0.01%)	0 (0.01%)	8 (0.01%)

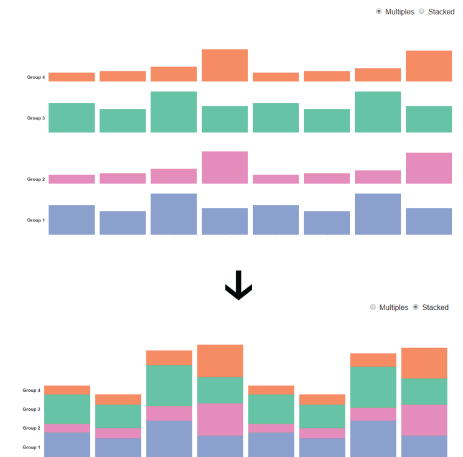
Example screenshot from Data QUEST Website



Force bubble diagram



Small Multiples



Stacked bar chart