PUBLIC HEALTHCARE MU REPORT ANALYSIS

By Stuti Chugh

BACKGROUND INFORMATION

Following is a small analysis of a public healthcare dataset provided by the Centers for Medicare & Medicaid Services(CMS) regarding meaningful use attestation. **CMS** oversees many federal healthcare programs, including those that involve health information technology such as the meaningful use incentive program for electronic health records (EHR).

In general, **attestation** is the process of validating that something is true. A healthcare organization must demonstrate **meaningful use** in order to be eligible for payments from the federal government under either the Medicare or Medicaid EHR incentive program.

Meaningful use is using certified electronic health record (EHR) technology to: Improve quality, safety, efficiency, and reduce health disparities, Engage patients and family, Improve care coordination, and population and public health, Maintain privacy and security of patient health information.
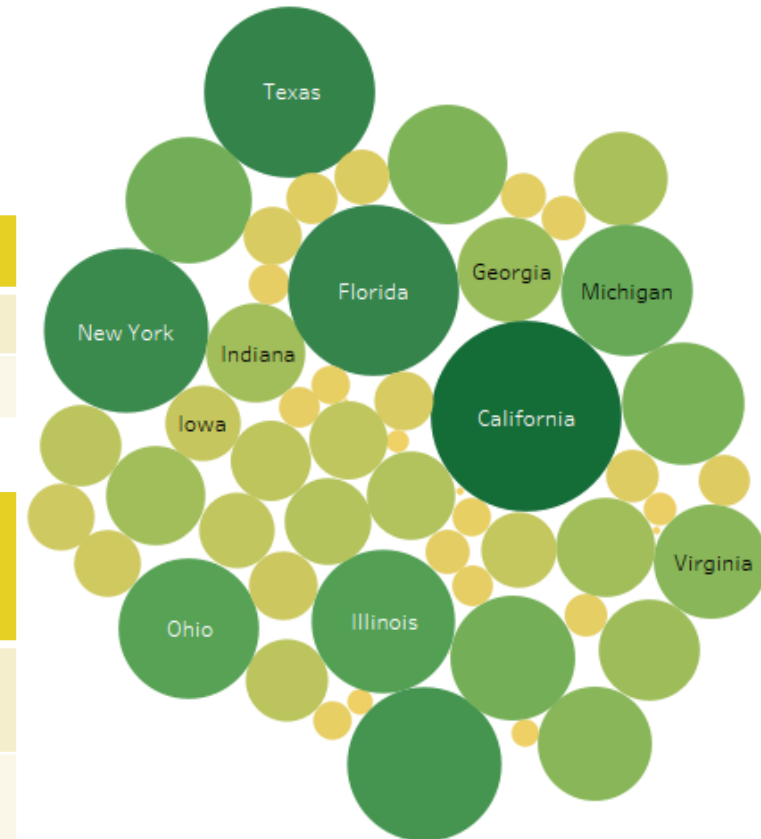
For more information check:

https://dashboard.healthit.gov/datadashboard/documentation/ehr-products-mu-attestation-data-documentation.php

INTRODUCTORY INSIGHTS AND REMARKS

➢ There are **1524808** rows in which program year and attestation year are different

➢ **298124** rows have similar program year and attestation year

➢ There are **360839** distinct NPIs and **867** distinct vendors listed in total
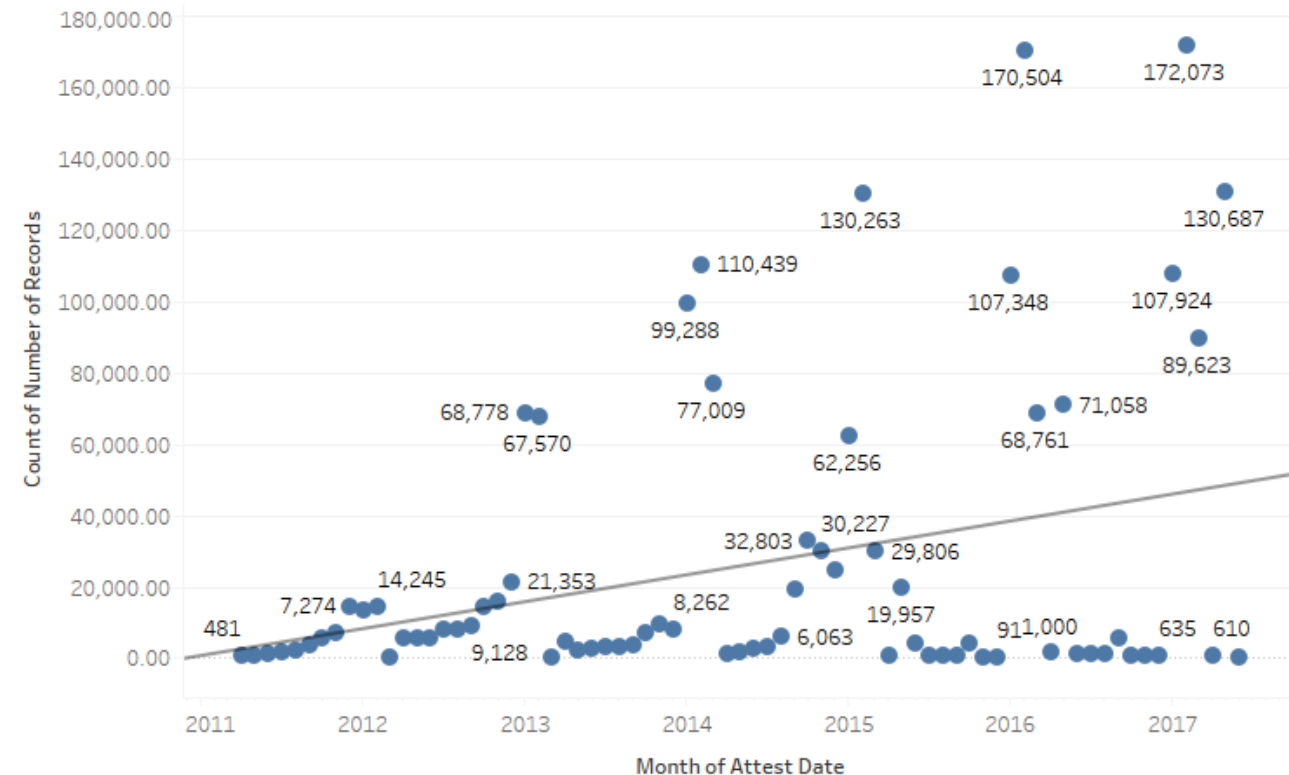
Most Participants

Top 10 Health Care Professionals Specialty Types

% total	# of Distinct NPI	Provider Type
98.68%	356083	EP
1.32%	4756	Hospital

Business State Territory	# of Distinct NPI	% total
Switched State	5308	1.47%
Consistent State	355531	98.53%

TOTAL ATTESTATION TREND ANALYSIS

➢ The given graph gives a total of attestations reported in this database for each month.

➢ Doing a similar graph by vendor for each month and calculating percent total for each vendor may not lead to insightful and accurate results due to the following reasons:
  ➢ A lot of providers submit multiple EHR documents each year(sometimes even each month). Thus numbers of attestations are high some months and low in the other months. This doesn't have a direct correlation with vendor popularity because a user might have already fulfilled MU attestation in a year or some providers might just need more documentation to be submitted for the same MU requirement leading to more attestation submissions
  ➢ The MU definition is sometimes very specific each year and each stage
  ➢ Some providers could have possibly submitted their attestations ahead of time while others might have waited till the end of the deadline. This is another thing that effects vendor market share for a certain month but doesn't necessarily reflect the popularity and growth of vendor
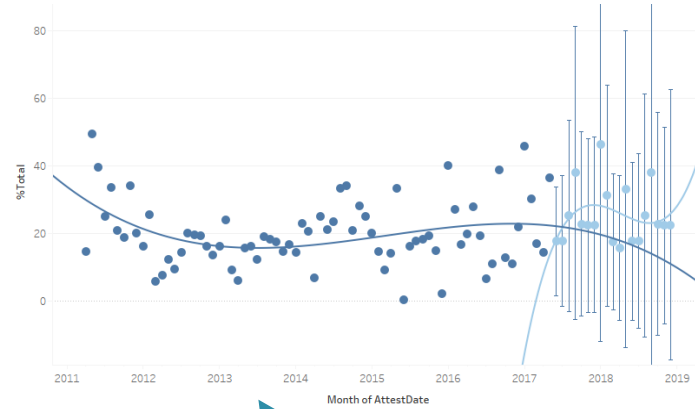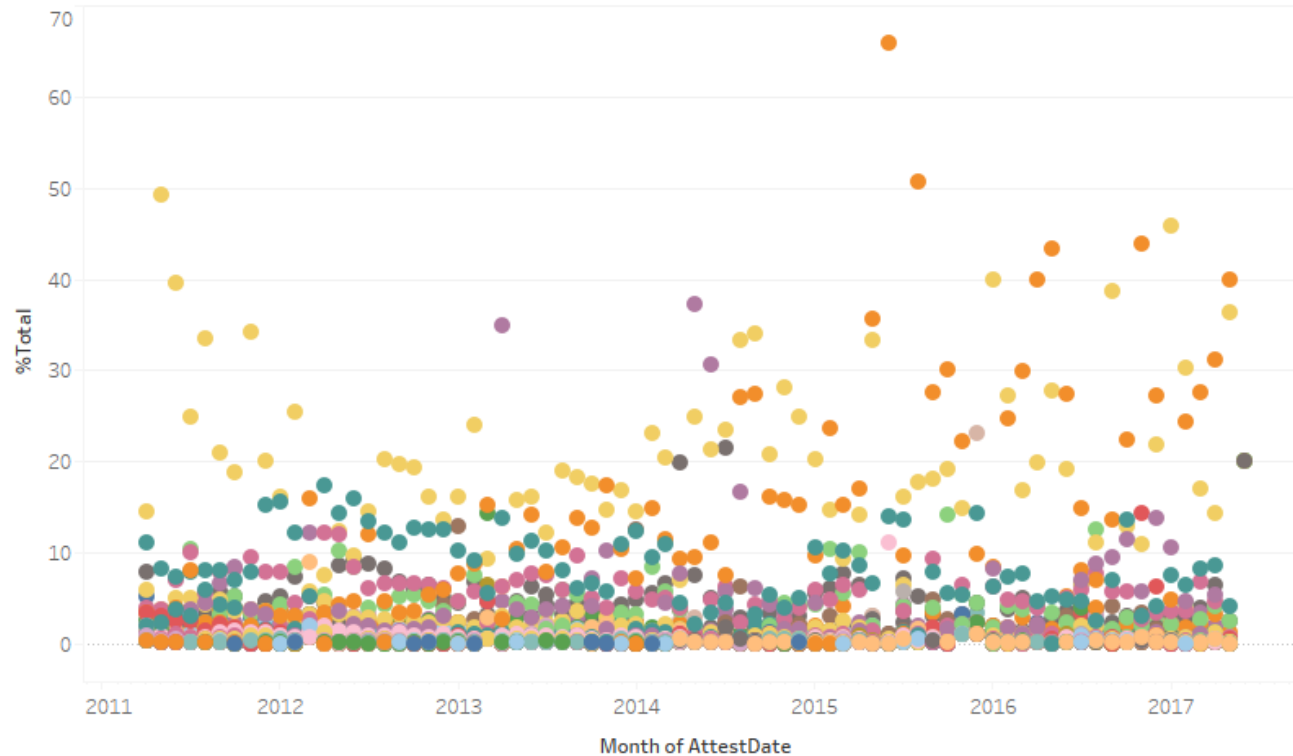
Total Attestation per Month

Count of Number of Records vs. Month of Attest Date

Data points: 481, 7,274, 14,245, 9,128, 21,353, 67,570, 68,778, 8,262, 99,288, 77,009, 110,439, 6,063, 62,256, 32,803, 30,227, 29,806, 19,957, 130,263, 911,000, 68,761, 71,058, 170,504, 107,348, 635, 610, 172,073, 107,924, 130,687, 89,623
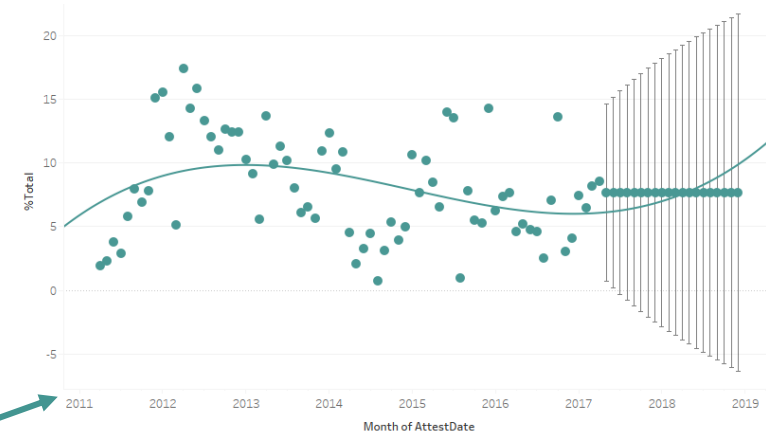
MARKET SHARE

Regardless of the potential inaccuracy it's still interesting to look at the market share breakdown and trends for all vendors, especially for some famous health tech vendors.
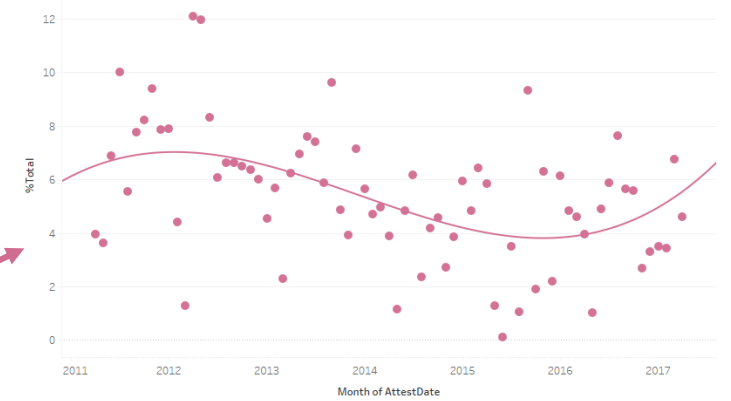

Epic

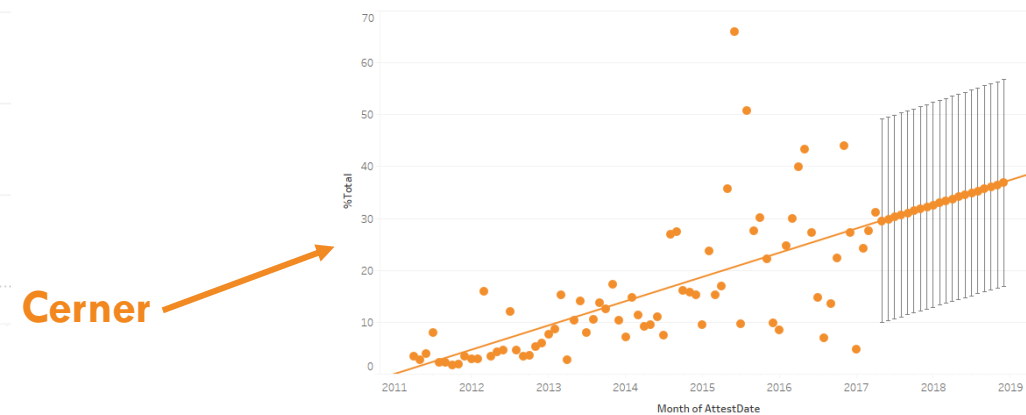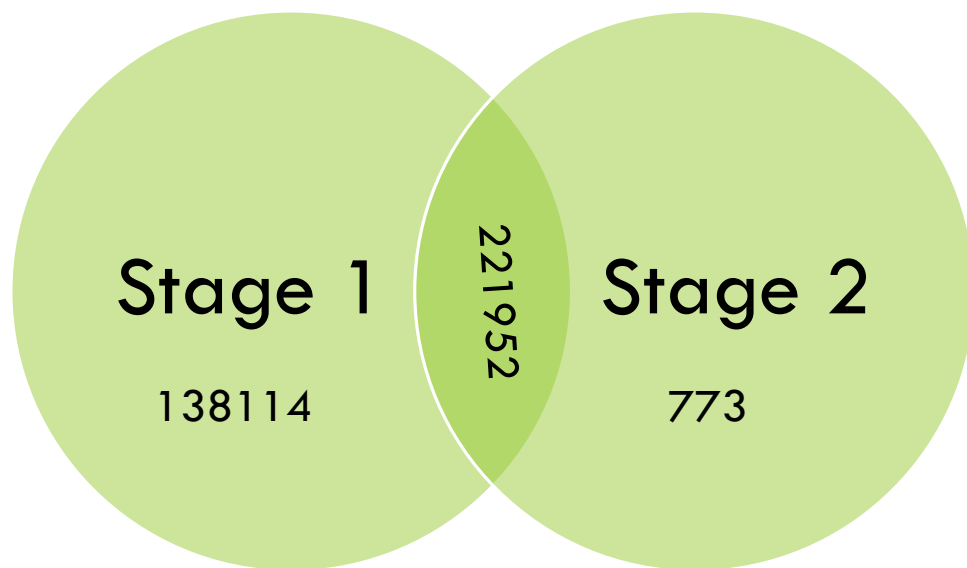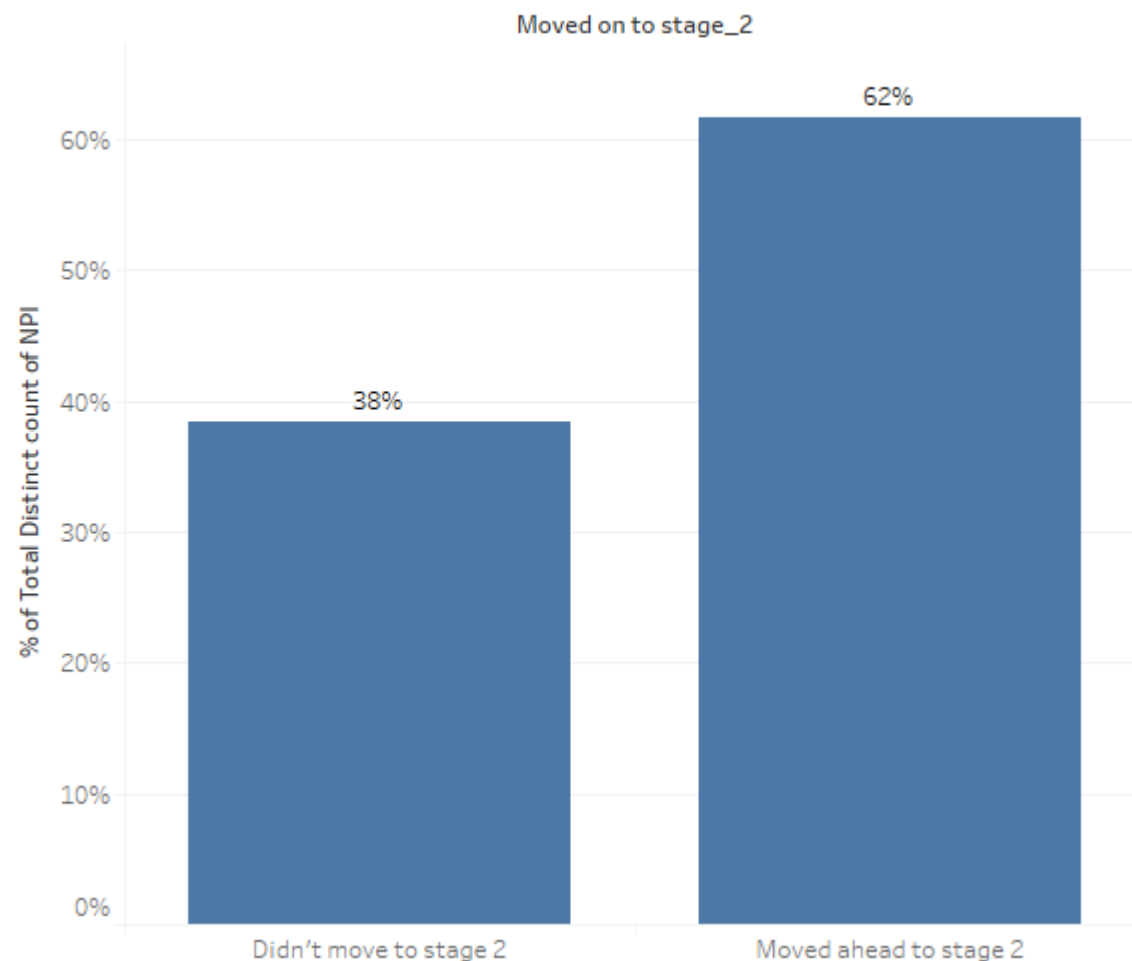Allscripts

eClinical

Cerner

Market Share

PROGRAM STAGE PROGRESS

As shown here out of the total of **360366** distinct health care providers only **221,952** moved on to stage 2. There are **773** providers who are listed in just for stage 2 in the given data. This is not because they were allowed to just skip stage 1. It's because provider previously participated and completed stage 1 in a state Medicaid EHR Incentive Program. Some providers couldn't proceed to stage 2 because they hadn't spent at least 2 years in stage 1 by 2016 or because their submitted EHR product didn't meet all the MU requirements.

Stage 1 — 138114
221952
Stage 2 — 773

Stage Trends

Moved on to stage_2

% of Total Distinct count of NPI

	Didn't move to stage 2	Moved ahead to stage 2
	38%	62%

ATTESTATION COUNT BY VENDOR AND PROGRAM YEAR

➢Some health providers turned in multiple unique attestation products in a single year.

➢Some of them also used different vendors to turn in multiple EHR products to meet the MU definition requirements. Here's a breakdown on that information:

Stayed with the same vendor	252192	70%
Switched vendors over the years	108647	30%

➢Graph on the right is the breakdown of top 15 EHR vendors whose products were used the most to submit MU attestation

➢Following is the table of count of vendors in the market whose products were used to submit MU attestations each year and count of users who used submitted more than 1 attests each year

YEAR	VENDOR COUNT
2011	359
2012	580
2013	666
2014	657
2015	484
2016	485
2017	7

Year	>1 EHR product used	Total Attests
2011	3503	59230
2012	21426	191214
2013	41135	238113
2014	51619	236237
2015	65013	229968
2016	86812	233416
2017	1	9

Top 15 vendors with most attestations