

Statewide Trends in Vitamin D Testing Oregon, 2016 – 2021

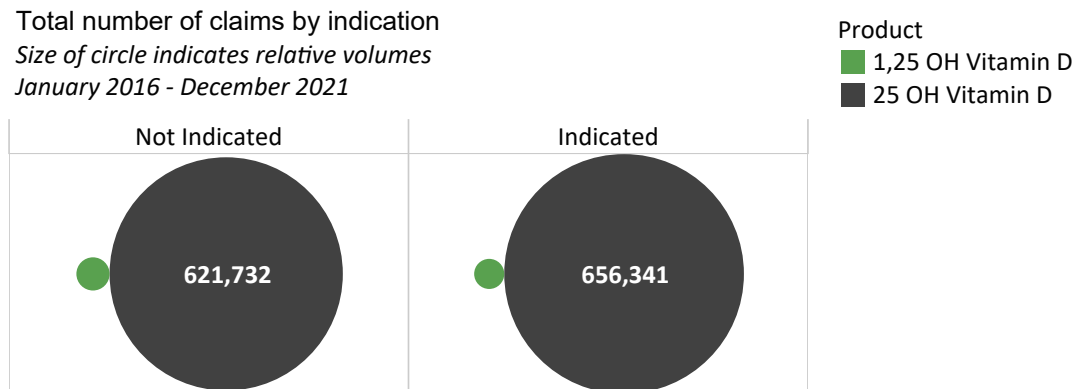
There is insufficient evidence that Vitamin D testing in healthy asymptomatic individuals, or for conditions not specifically associated with Vitamin D deficiency, improves health outcomes. There are no evidence-based clinical practice guidelines that recommend routine Vitamin D testing for screening of asymptomatic individuals. A recent review of Vitamin D testing in Oregon found that during the three-year period from 2016 through 2018, 284,350 Vitamin D tests, accounting for more than 25% of tests ordered, were potentially unnecessary.

Oregon Health Leadership Council's Best Practice Committee is chartered to recommend and execute community and/or statewide evidence based best practice strategies. The Committee is comprised of representatives from Oregon medical groups, hospitals, health systems, health plans, state agencies and professional associations. The Committee's Reducing Ineffective Care workgroup's mission is to identify and implement collaborative strategies for reducing low-value healthcare services, including unnecessary Vitamin D testing.

In 2017 – 18, several health systems in Oregon began internal initiatives to reduce low-value Vitamin D testing. Health plan and health system leaders participating in the Best Practice Committee aimed to broaden this initiative and collaboratively developed guidelines for Vitamin D testing, based on the best available clinical evidence and consensus of expert opinion. These guidelines were distributed statewide in 2019. This report provides an analysis of Vitamin D testing trends statewide starting with 2016, and will help providers and systems better understand the impact of their efforts to reduce low-value Vitamin D testing.

The majority of claims, whether indicated or not, are paid. 1,25 OH Vitamin D is much more expensive, but is performed much less frequently.

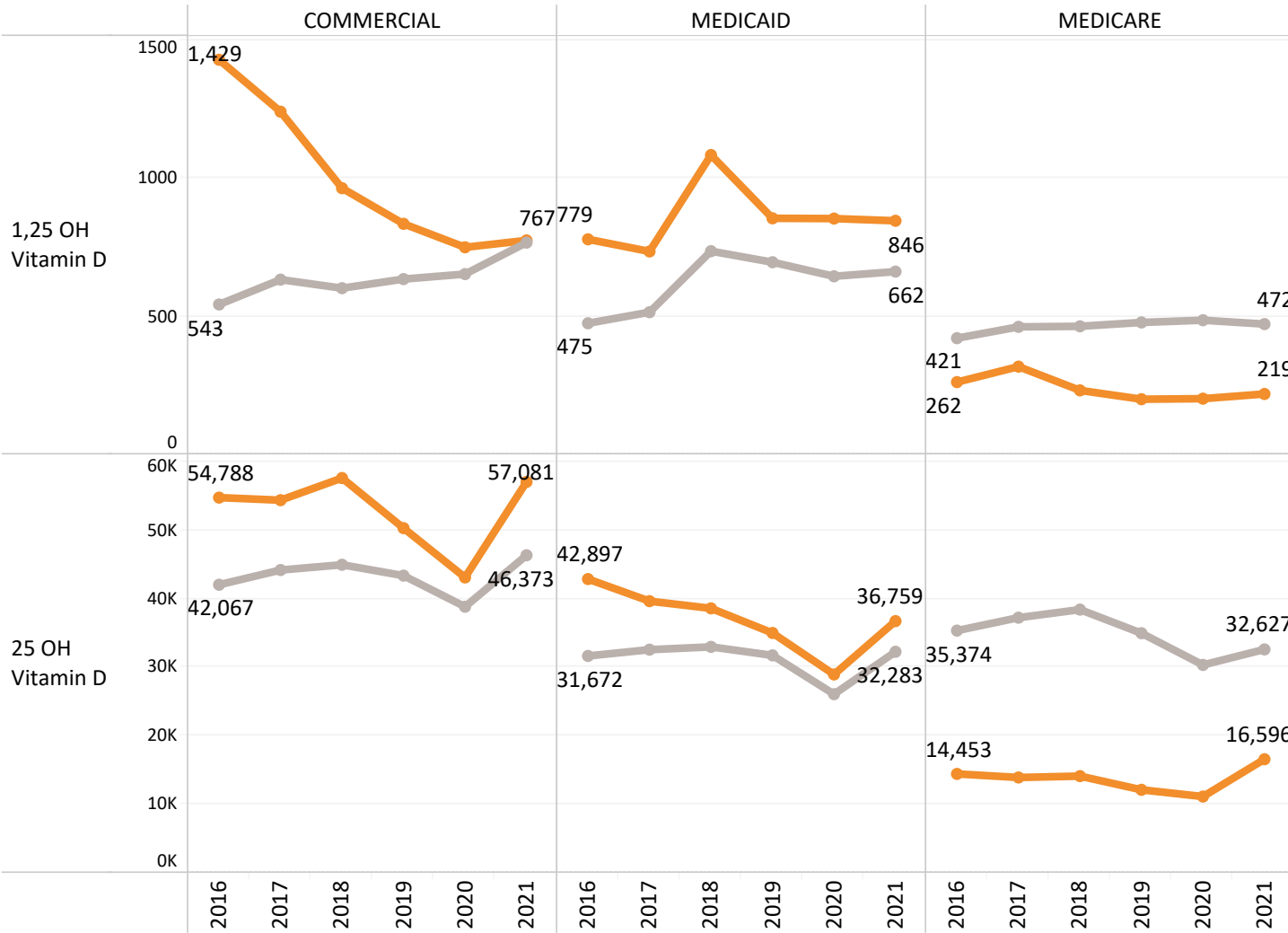
Five commercial payers in Oregon allowed a total of \$2.6 million in non-indicated Vitamin D tests in 2016 and only \$1.3 million in 2021.



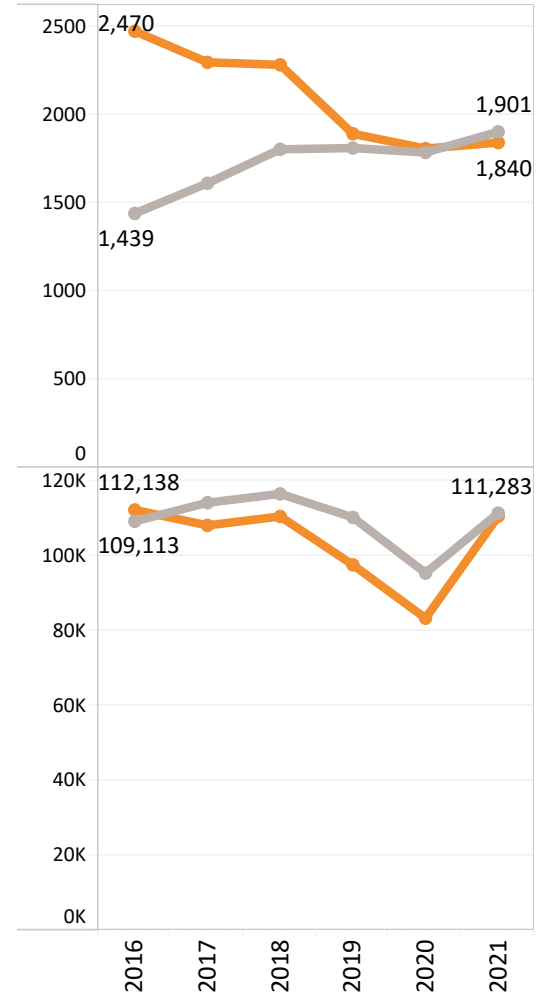
Trends in Statewide Results for Vitamin D Testing

The volume of non-indicated claims decreased in 2019 and 2020, then increased in 2021.

Number of Claims Submitted



COMMERCIAL, MEDICAID and MEDICARE ADVANTAGE

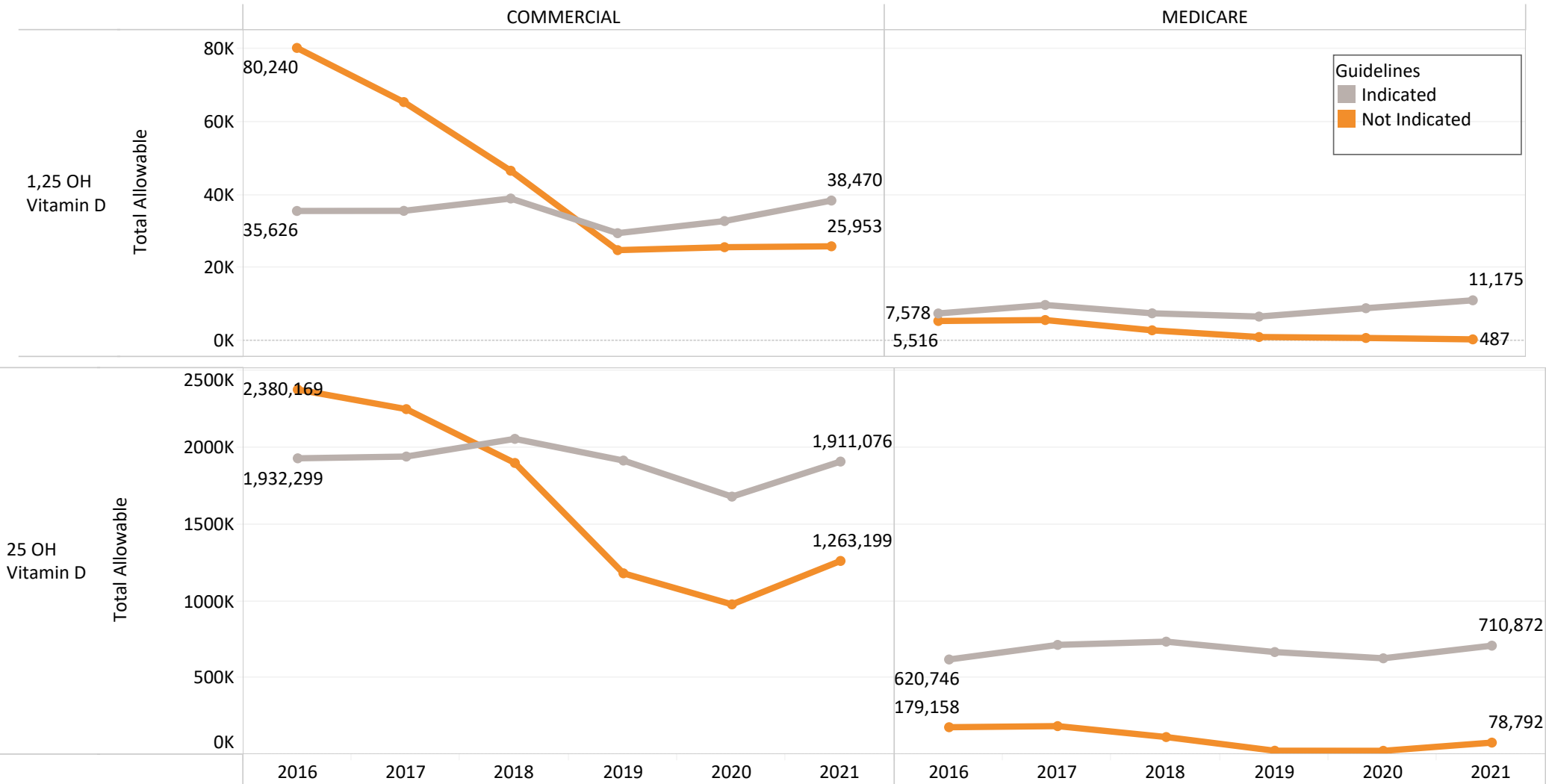


Across all product types, about 54% of the claims paid are indicated. Across all product types, about 32% of the claims denied are indicated.

Among Medicaid and Medicare Advantage members, the proportion of paid claims that are for an indicated diagnosis has been increasing, while the proportion of denied claims that are for an indicated diagnosis has been decreasing.

Costs of Vitamin D Testing

Total cost for non-indicated tests has been decreasing for commercial payers from 2018 to 2020, and then increased in 2021 (allowable costs in dollars). The same trend has been seen in beneficiaries with Medicare, but with a more gradual change in costs.



Statewide Results for Vitamin D Testing

Count of all Vitamin D Testing by whether Indicated

Test	Indicated Dx	COMMERCIAL						MEDICAID						MEDICARE					
		2016	2017	2018	2019	2020	2021	2016	2017	2018	2019	2020	2021	2016	2017	2018	2019	2020	2021
1,25 OH Vitamin D	Indicated	543	633	602	635	653	767	475	515	736	696	645	662	421	462	464	478	486	472
	Not Indicated	1,429	1,241	964	835	750	775	779	735	1,084	855	854	846	262	318	232	200	202	219
25 OH Vitamin D	Indicated	42,067	44,216	44,985	43,398	38,856	46,373	31,672	32,590	32,998	31,758	26,093	32,283	35,374	37,261	38,438	34,992	30,360	32,627
	Not Indicated	54,788	54,412	57,643	50,332	43,133	57,081	42,897	39,672	38,622	35,028	28,971	36,759	14,453	13,933	14,131	12,133	11,148	16,596

Total Allowable Cost by Indication (in dollars)

Test	Indicated Dx	COMMERCIAL						MEDICARE					
		2016	2017	2018	2019	2020	2021	2016	2017	2018	2019	2020	2021
1,25 OH Vitamin D	Indicated	36K	36K	40K	31K	35K	40K	9K	12K	10K	11K	14K	13K
	Not Indicated	80K	66K	47K	27K	29K	28K	6K	7K	4K	3K	3K	2K
25 OH Vitamin D	Indicated	1,932K	2,010K	2,353K	2,289K	1,958K	2,248K	690K	838K	1,029K	969K	891K	1,081K
	Not Indicated	2,380K	2,398K	2,550K	2,074K	1,695K	2,262K	210K	271K	372K	310K	276K	517K

Average Allowable Costs per Claim (in dollars)

Test	Indicated Dx	COMMERCIAL						MEDICARE					
		2016	2017	2018	2019	2020	2021	2016	2017	2018	2019	2020	2021
1,25 OH Vitamin D	Indicated	65.6	56.6	65.7	48.8	53.7	51.5	20.4	25.4	21.8	23.5	29.8	27.3
	Not Indicated	56.2	52.8	49.1	32.3	38.2	35.7	24.8	22.2	18.8	15.9	12.9	7.6
25 OH Vitamin D	Indicated	45.9	45.5	52.3	52.7	50.4	48.5	19.5	22.5	26.8	27.7	29.4	33.1
	Not Indicated	43.4	44.1	44.2	41.2	39.3	39.6	14.5	19.5	26.3	25.5	24.8	31.1

Cost data is for the following five participating commercial payers:

- * Moda Health Plan Inc
- * PacificSource
- * Providence Health Plans
- * Regence Blue Cross Blue Shield
- * Tuality Health Alliance