

## Statewide Trends in Vitamin D Testing Oregon, 2016 – 2020

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.

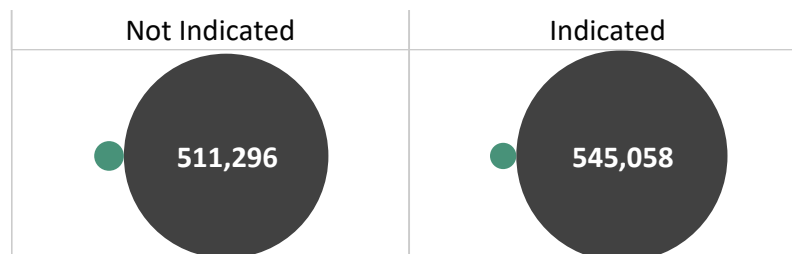
Oregon Health Leadership Council’s Best Practice Committee is chartered to recommend and execute community and/or statewide evidence based best practice strategies. The Committee is comprised of representatives from Oregon medical groups, hospitals, health systems, health plans, state agencies and professional 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 \$1.2 million in 2019.**

Total number of claims by indication  
Size of circle indicates relative volumes  
January 2016 - December 2020

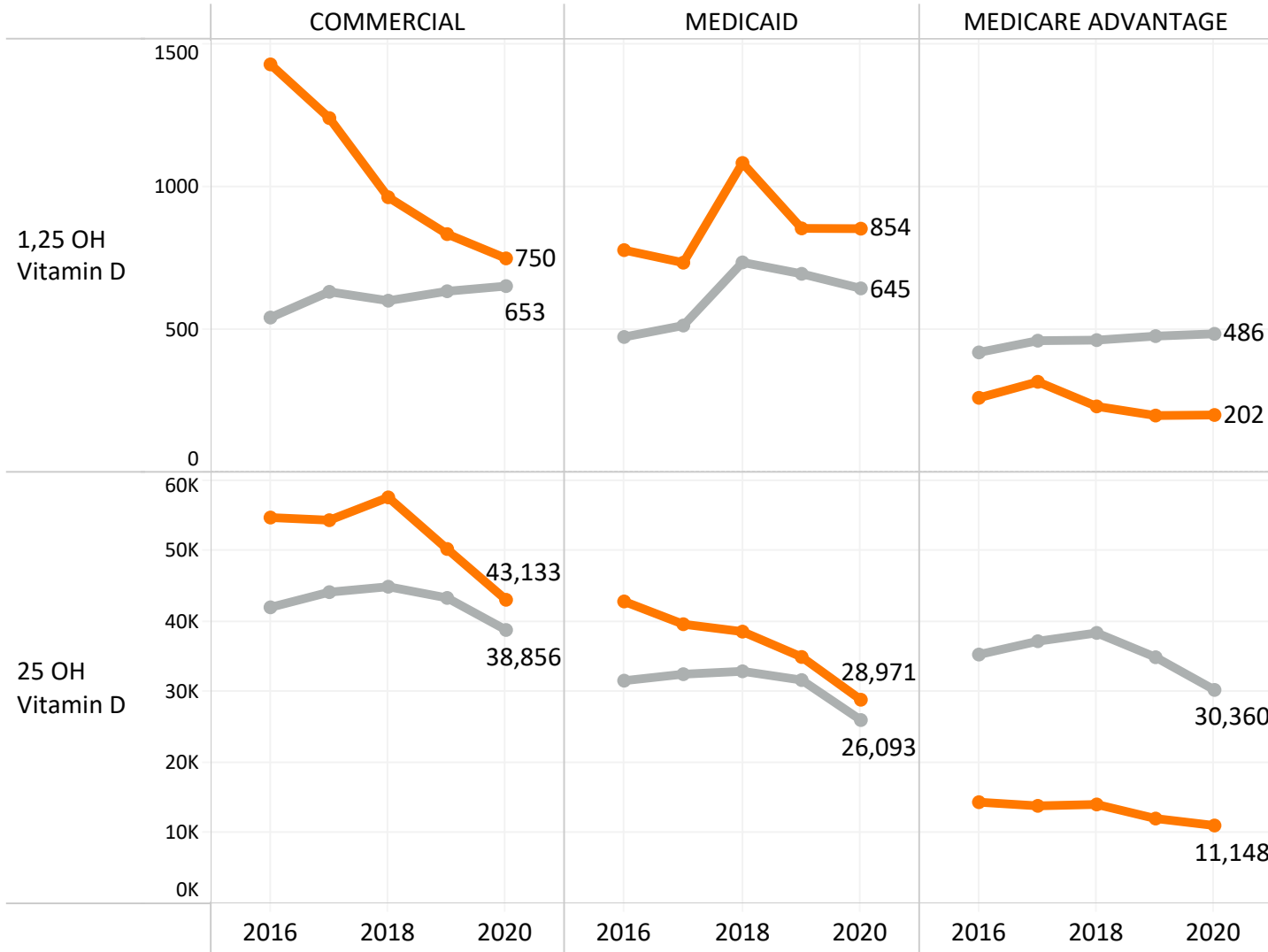


Test  
■ 1,25 OH Vitamin D  
■ 25 OH Vitamin D

# Trends in Statewide Results for Vitamin D Testing

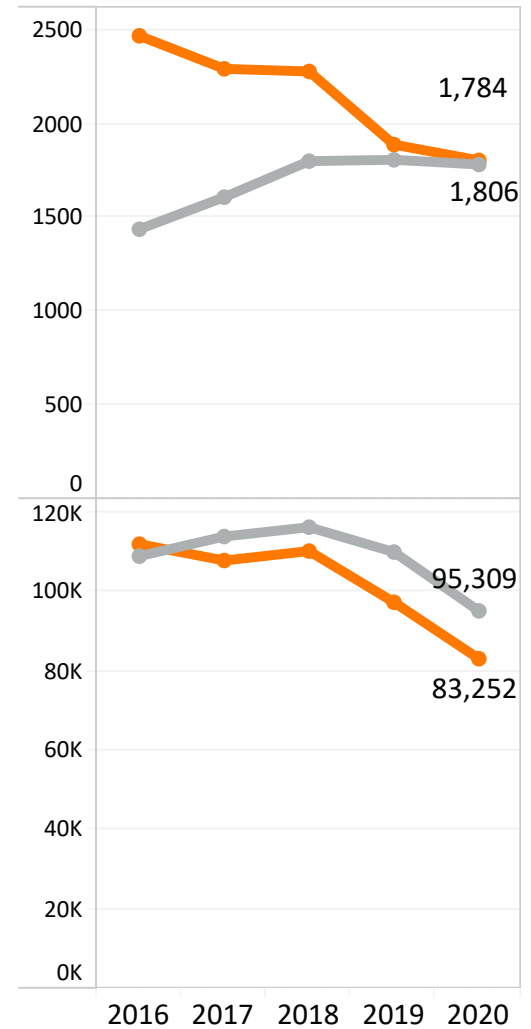
The volume of non-indicated claims decreased in 2019 and 2020.

## Number of Claims Submitted



Guidelines  
■ Indicated  
■ Not Indicated

## COMMERCIAL, MEDICAID and MEDICARE ADVANTAGE



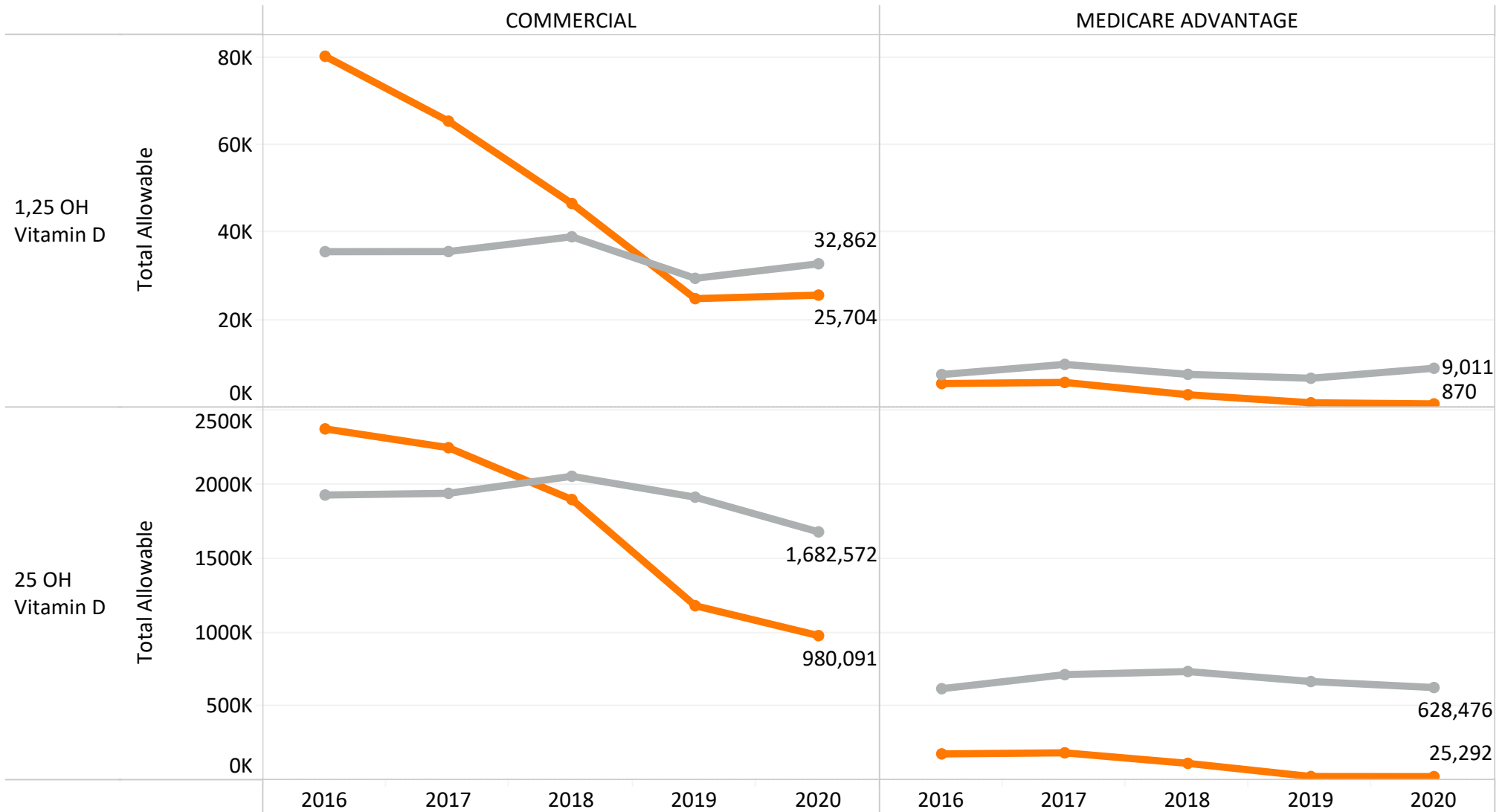
Across all product types, about half of the claims paid are indicated. Across all product types, about 1/3 of the claims denied are indicated.

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 tests without indication has been decreasing for commercial payers.  
 (Allowable costs in dollars)

Guidelines  
■ Indicated  
■ Not Indicated



## Tables of Statewide Results for Vitamin D Testing

Count of all Vitamin D testing by whether Indicated

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

Total Allowable Cost Table by Indication  
(in dollars)

Test	Indicated Dx	COMMERCIAL					MEDICARE ADVANTAGE				
		2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
1,25 OH Vitamin D	Indicated	35,626	35,655	39,030	29,543	32,862	7,578	9,896	7,617	6,723	9,011
	Not Indicated	80,240	65,425	46,630	24,905	25,704	5,516	5,776	2,964	1,126	870
25 OH Vitamin D	Indicated	1,932,299	1,943,763	2,059,114	1,917,712	1,682,572	620,746	715,899	736,921	669,258	628,476
	Not Indicated	2,380,169	2,252,891	1,902,036	1,182,597	980,091	179,158	186,337	115,075	25,891	25,292

Average Allowable Costs per Claim  
(in dollars)

Test	COMMERCIAL					MEDICARE ADVANTAGE				
	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
1,25 OH Vitamin D	62.70	56.19	58.55	40.21	43.87	31.63	36.03	30.50	22.88	23.64
25 OH Vitamin D	47.13	45.35	45.18	39.90	38.72	25.93	29.19	30.58	26.97	25.59

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