BACKGROUND

- 10% of the US population has severe vitamin D deficiency, with highest prevalence in African Americans.\(^1\)
- Vitamin D deficiency is significantly higher among the urban-living population, obese patients, and in the Midwest.\(^2\)
- Multiple studies suggest that vitamin D deficiency may contribute to the pathophysiology of many diseases including cardiovascular disease, depression, and cancer.\(^3,4\)
- There are limited guidelines regarding the frequency and indications for vitamin D level testing.

RESULTS

- Of the patient cohort (n=3,976), only 17.56% had vitamin D levels tested and 12% had a prior diagnosis of vitamin D deficiency. Of those tested, 68% were females, 72% were African Americans, with an average age of 59 years.
- Of those with vitamin D deficiency who were re-tested, 52% had an increase in their vitamin D levels, and 40% of them became vitamin D sufficient.
- Although most patients tested had vitamin D deficiency (71%), our study did not show significance between low vitamin D levels and medical conditions known to cause vitamin D deficiency (table 2).

METHODS

- The study population includes all adult patients (≥18 years old) who attended the clinic from January 2018 to December 2018.
- Retrospective analysis included: demographic information, past medical history consisting of various comorbidities
- Vitamin D levels ≥ 30ng/ml were considered normal, while levels < 30ng/ml were considered deficient.
- Basic descriptive statistics were used to describe the population, while Chi square tests and t-tests were used as appropriate to compare groups.

CONCLUSIONS

- Although African Americans are generally known to have lower levels of vitamin D when compared to other races, we found they were not more likely to be tested, or to have vitamin D deficiency.
- This retrospective study did not show significance between common medical problems associated with the low vitamin D levels and vitamin D deficiency.
- The majority of patients who had a repeat follow-up with vitamin D test had an improvement in their level.

RECOMMENDATION

- The decision to test for vitamin D level should remain individualized.

REFERENCES