

## e-HEALTH RECORD WARNINGS FOR TRANSLATION OF COCHRANE EVIDENCE ON VITAMIN D TESTING

### Background

The Lab Director of the Navarre Health Service (Spain) reported a steady increase in vitamin D testing orders over the last few years suggesting overuse. A report was made that identified seven Cochrane reviews along with some other non-Cochrane reviews on this topic that was disseminated to all healthcare professionals in the province. Also, e-Health Record (e-HR) warnings based on the report recommendations were implemented.

### Objectives



To assess the impact of the implementation of e-HR warnings on doctors' ordering of vitamin D testing

### Methods

A report was elaborated based on 7 Cochrane reviews (informe MAPAC), also published in the Drug & Therapeutics Bulletin of Navarre, Spain

Recommendations were disseminated to all health professionals in Navarre (Spain)

Vitamin D testing is **only** indicated in:

- Differential diagnosis of primary/secondary hyperparathyroidism
- Possible hypoparathyroidism, hypo/hypercalcemia or hypo/hyperphosphatemia
- Malabsorption syndrome
- Patients over 65 years of age institutionalized



e-Health Record (e-HR) warnings based on the report recommendations were implemented for HOSPITAL DOCTORS (Jun 2018)

e-Health Record (e-HR) warnings based on the report recommendations were implemented for FAMILY DOCTORS (Feb 2023)



**e-HR warning screenshot.** As doctors click on a lab test order, a warning will pop up showing clinical situations where vitamin D testing is indicated and those where NOT indicated.

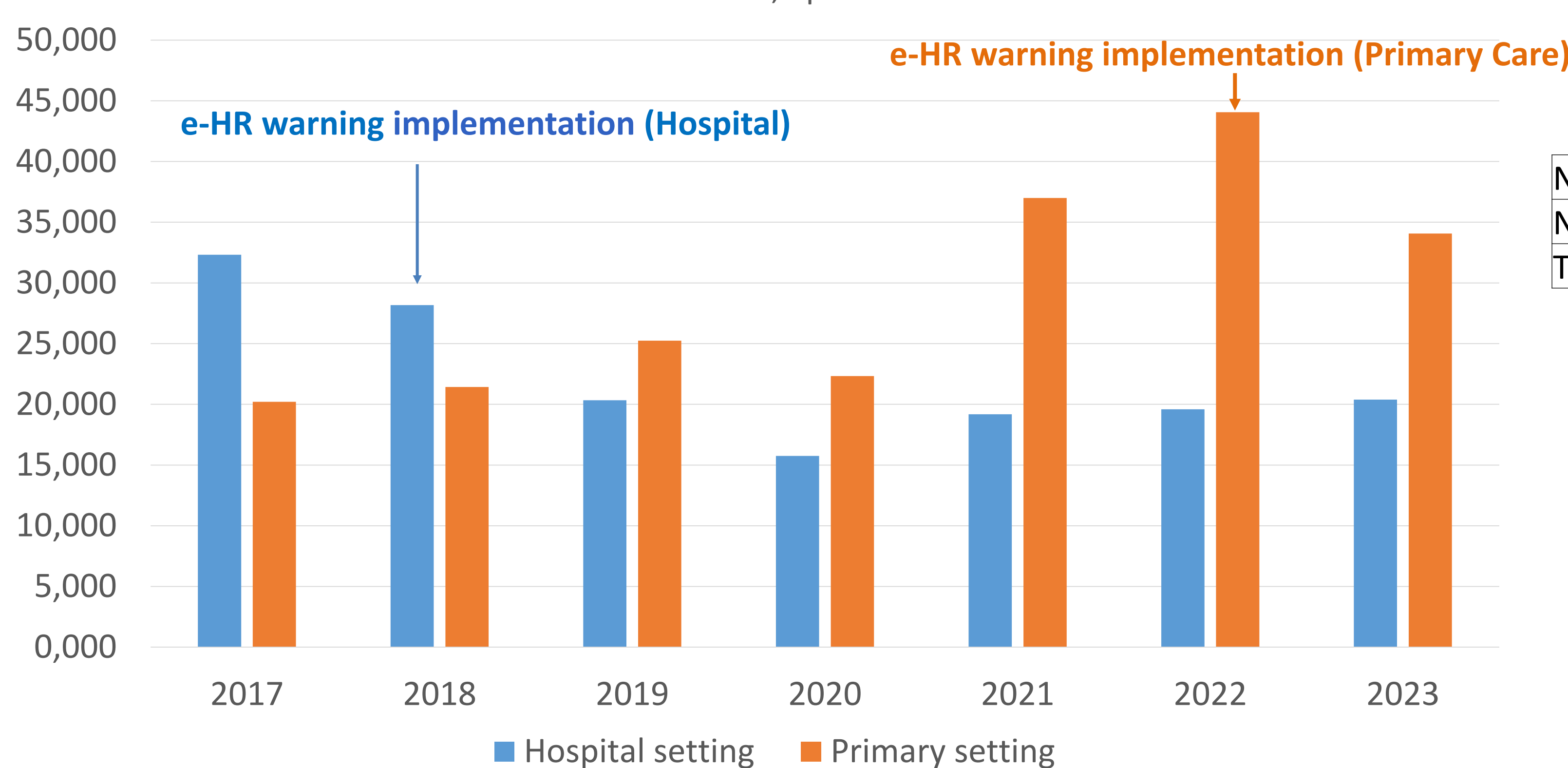
Subsequently, we assessed the **impact of the measures** adopted on vitamin D test orders:

The number of vitamin D orders per 100 person-years pre- and post-intervention were analyzed separately for hospital and family doctors

### Results

#### Evolution of vitamin D tests performed.

Navarre Health Service, Spain



	2017	2018	2019	2020	2021	2022	2023
No tests/100 person-years (Hospital)	5.03	4.37	3.12	2.39	2.90	2.96	3.05
No tests/100 person-years (Primary Care)	3.15	3.32	3.88	3.40	5.59	6.65	5.10
Total No tests/100 person-years	8.18	7.68	7.00	5.79	8.49	9.60	8.15
	before intervention						
	after intervention						

Period	RR (95% CI)
2018 vs 2023: 5-years after intervention (Hospital)	0.70 (0.69 to 0.71)
2018 vs 2022: NO intervention for 4 years (Primary Care)	2.00 (1.97 to 2.03)
2022 vs 2023: one year after intervention (Primary Care)	0.77 (0.76 to 0.78)

### Conclusions

Evidence-based e-HR warnings on the use of vitamin D testing might result useful in improving appropriate use of this test in clinical practice.

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