A provider-facing dashboard to monitor hydroxychloroquine dosing within the VA Healthcare System: the Albuquerque VA experience

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Background

Through the SFVA Measurement Science QUERI led by Principle Investigator Gabriela Schmajuk MD, the Albuquerque VA Healthcare System was enrolled in a multi-site study to identify patients with hydroxychloroquine doses greater than the recommended 5mg/kg to reduce the risk of retinal toxicity.

The purpose of this dashboard is to identify patients who are prescribed higher than recommended doses of hydroxychloroquine.

Initial assessment, Feb 11, 2021.

274 patients prescribed HCQ in Station 501 (NMVAHCS)

29 patients designated as "high dose".

- 12 prescriptions from Abq VA Rheumatology provider/fellow patients
- 9 prescriptions from Ambulatory Care providers
- 4 prescriptions from "rural health CBOC" (Community based outpatient clinic_)
- 3 prescriptions for Community Care contracted provider (blank on service section)
- 1 prescription from "Fee Services" provider

Using the Dashboard tool, patients with hydroxychloroquine doses greater than 5mg/kg were identified. Data about these patients, including weight, rheumatologic diagnoses, dosages, and prescribing providers was collected. The prescribing providers were then contacted with dosage recommendations.

You will notice there was a "process change" on 11/23/2020 when we changed the definition of "High Dose" from 5.0mg/kg/day to 5.2mg/kg/day to allow for small discrepancies in the real vs calculated dose.

In summary, your site:
- Was granted access on 11/16/2020
- Has 6 approved users
- As of 3/31/2020, has had 16 dashboard interactions

Methods

Using the Dashboard tool, patients with hydroxychloroquine doses greater than 5mg/kg were identified. Data about these patients, including weight, rheumatologic diagnoses, dosages, and prescribing providers was collected. The prescribing providers were then contacted with dosage recommendations.

Results

Twenty-eight patients were identified with Hydroxychloroquine dosages greater than 5mg/kg. The prescribing providers were contacted of the recommended change via secure EMR messaging. It was expected that with recommendations, the prescribing providers would decrease the prescribed dosages of hydroxychloroquine to be in line with recommended guidelines to reduce risk of retinal toxicity. However, per recent Dashboard report, these changes have not yet been made.

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Discussion

At the time of this writing, one month after dosage recommendations were given to prescribing providers, the outreach has not been effective at reducing the hydroxychloroquine doses prescribed to the identified patients. There are several reasons for this. First, it may take time for these changes to take effect. It is also possible that the providers are waiting for follow-up appointments with their patients to change the doses. Second, hydroxychloroquine only comes in 200mg tablets. With most patients needing a dosage of approximately 300mg a day. This is difficult to dose with every other day dosing. Lastly, some referrals back to rheumatology have been made for patients identified within the study with prescriptions of hydroxychloroquine from their primary care provider. In time, we expect to see some improvement in results.

Reference:
Michael F. Marcone, Ulrich Kolhoff, Timothy Y.Y. Lei, Ronald B. Maller, William F. Mieher, Recommendations on Screening for Chloroquine and Hydroxychloroquine Retinopathy (2016 Revision), Ophthalmology, Volume 123, Issue 6, 2016, Pages 1386-1394, ISSN 0161-6420,