Effective use of topical corticosteroids: There’s an app for that!

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Opportunity to enhance topical corticosteroid prescribing

• Access to dermatologists is limited yes skin conditions are frequent in the community.
  – Dermatologic conditions affect 20-36% of patients in PCP offices
  – However PCPs report diagnostic and management uncertainty.¹,²
• Prescribing topical corticosteroids can be tricky or nuanced, so there are opportunities to support clinicians through a clinical decision support.
  – PCPs have been shown to prescribe either inappropriately high-potency TCS or, conversely, inappropriately low-potency TCS.³
  – In addition, drug costs may be higher if multiple small units are dispensed over a treatment course rather than one large unit.⁴
• Skin conditions can be more effectually treated by PCPs by facilitating treatment recommendations to ensure stronger steroids are used (when appropriate) and patients are prescribed a sufficient amount.

Can an App do that?

- Mobile devices and apps provide significantly increased access to point-of-care evidence and, with use by providers, demonstrate better clinical decision-making and improved patient outcomes.5,6
- Our goal was to develop a point-of-care decision support app for PCPs in order to facilitating effective topical corticosteroid prescribing.

Methods

• The app was developed using recommendations derived from a systematic literature review of clinical practice guidelines.

• A multidisciplinary group designed the app in iterative rounds of design and evaluation
  – The group included professional app designers, PCPs (3), and dermatology providers (3).

• To evaluate the effect of the app on actual prescribing, a second group of PCPs were recruited to use the app in clinical practice for three months.

• What did it look like...?
There are only 2 screens before clinicians get treatment recommendations.

1. This screen collects patient age group, allowing for specific recommendations for young children.

2. Select the location of the rash, then at the bottom specify the frequency of use and duration.

The app displays recommended steroid by potency, for each body site with suggestions for vehicle and amount.

Available at: www.CorticoCreamApp.com
Free download in app stores, look for: CORTICOCREAM CALCULATOR
The CorticoCream Calculator app – it makes it easier to appropriately prescribe topical steroids.

- A study at Penn State with Family and Community Medicine physicians compared topical steroid prescriptions before and after use of the CorticoCream Calculator app.
  - There was a change away from low-potency and towards high-potency steroids. Low-potency prescriptions decreased from 25% to 22.6% after initiating use of the application. High-potency prescriptions increased from 16.0% to 19.0%.
  - There were changes in the use of various steroid formulations. There was an increase in gel (1.0% to 2.0%) and solutions (1.9% to 3.1%) formulations.
  - Larger volumes were used more often. Medium-sized tubes (45-60g) increased by 10% (38.2% to 48.2%) while small tubes (15-30g) decreased (42.0% to 36.3%).
- In addition, clinicians had greater certainty about prescribing topical steroids.
  - Feeling certain about the quantity increased from 30.8% to 46.1%.
  - Feeling certain about the vehicle increased from 30.8% to 61.5%.