



2021 LEAD Capstone Poster Session

Team Based Diagnosis: Using a Virtual Platform to Facilitate Challenging Patient Case Discussions

Stephanie A. Savory, MD
Associate Professor
Department of Dermatology



Abstract

- Dermatology is a visual field that can be easily communicated through simple technology
- This project aims to create a supportive, secure virtual platform that increases collaboration between dermatologists in order to improve diagnostic accuracy and timeliness
- An existing forum on Facebook currently has over 4,700 vetted members and is very popular, but the platform is unstable
- The platform can be integrated into electronic medical record systems to enhance collaboration in other visual fields
- To move forward, I will need IT, legal and website support



Objectives

- Increase collaboration between dermatologists to improve diagnostic accuracy and treatment approach
- Create a safe, secure, accessible, user-friendly platform for board certified dermatologists in the United States and Canada
- Eventually extrapolate the platform to other visual specialties



Background Information

- Evidence abundantly demonstrates that a team-based approach to patient care reduces errors, improves patient outcomes, and increases diagnostic accuracy.
- Team-based diagnosis is not well developed, especially in dermatology.
- Dermatology is a visual field that can be easily communicated and shared through technology as simple as a photograph



Background Information

- The Board Certified Dermatologists (TBCD) is a private Facebook group created 5 years ago and open to board-certified Dermatologists in the United States and Canada subject to moderator approval
 - Currently over 4,700 members
 - Very popular with multiple postings and responses per day
 - Postings ask for help with diagnostic dilemmas, unanticipated treatment responses, clinical efficiency and workflow, etc.
 - Ease and accessibility is favored
 - But platform is inherently unstable and subject to algorithmic, inappropriate Facebook censorship



Background Information

A new platform is urgently needed



Specific Aims

- Increase diagnostic collaboration between dermatologists in both private and academic practice to improve diagnostic accuracy and timeliness
- Provide a general forum for dermatologists to connect, share specific diagnostic advice, recommend subspecialists for referral, coordinate specialized genetic or diagnostic testing, archive treatment algorithms, etc.



Project Plan

- Create a new and improved support arena that tackles both team-based diagnosis for improvement in patient care as well as education and collaboration of its members
- An “app” will be most user-convenient, but a password protected, members-only website may be most affordable



Project Plan

- **Website requirements**
 - Members must be board-certified Dermatologists from the United States or Canada
 - Photographs of patient cases should ideally be de-identified and posted with patient or guardian permission
 - I will serve as moderator to ensure appropriateness and professionalism of posts
 - Screenshots and “copy / paste” functions will not be allowed
 - Treatment advice and diagnostic considerations may be anecdotal, but citation of relevant literature will be highly encouraged.



Application of What You Learned at LEAD

- Team-based collaboration enhancing the skills and specialties of each member is essential to achieving a goal
- Communicating optimally to produce positive outcomes



Proposed Budget

- Greatest costs will be associated with website development
- Legal costs
- Start-up estimate \$15-20,000



Innovation and Significance

- Patients will see the greatest benefits from this pursuit
- Dermatologists will gain tremendous support from the community afforded by such a forum



Innovation and Significance

- This format should be easily integrated into electronic medical records.
 - All dermatologists using “Epic,” for example, should be able to post photos and questions regarding patient care to their colleagues.
- The photographic post-and-share format could easily be extrapolated to other visual specialties
 - Ex: radiology and gastroenterology



References

Committee on Diagnostic Error in Health Care; Board on Health Care Services; Institute of Medicine; The National Academies of Sciences, Engineering, and Medicine; Balogh EP, Miller BT, Ball JR, editors. Improving Diagnosis in Health Care. Washington (DC): National Academies Press (US); 2015 Dec 29. 4, Diagnostic Team Members and Tasks: Improving Patient Engagement and Health Care Professional Education and Training in Diagnosis.

Available from:

<https://www.ncbi.nlm.nih.gov/books/NBK338597>