Clinical Decision Support Systems (CDSS):
Teaching Specialty Areas of Medicine Without the Specialist

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Situation:
• Typically, training in “specialty medicine” such as dermatology is limited to 1–2 days during a 4-year medical curriculum.
• Internists consider themselves mediocre in dermatology, a 2.6 on a scale of 1–5. However, this does not change the number of patients they see and treat for skin disease.
• Dermatologists are focused on training dermatology residents and are rarely available for internal medicine education.
• The AMA, AAMC, and ACGME have all generated new curriculum goals and competencies, placing CDSS as a key directive in helping to improve efficiency and quality of care.

Challenge:
How do you provide adequate teaching in specialty medicine with minimal access to specialists who hold the knowledge?

Solution:
Implement a new program where non-specialty educators have the ability to teach specialty areas of medicine.

Strategy:
Develop and implement a “dermatology walk rounds” program that combines skill development in:
• Pattern recognition
• Differential diagnosis
• Diagnostic reasoning
• Skin morphology description
• Decision support utilization

This combination of skill sets allows the institution to yield the most effective and diagnostically accurate learning environment.

Method: Integrated Dermatology Walk Rounds

Dermatology Rounds
The program is introduced by a dermatologist and performed 1x per month with internal medicine residents rotating at an academic inpatient facility.

Interaction and Observation
During rounds, 3 patients are seen with their diagnoses unknown to the greater audience. The residents examine the patients, identifying patterns in presentations and other visual clues.

Developing the Differential Diagnosis
Residents generate a differential diagnosis using a visual clinical decision support software, VisualDx, entering visual clues observed during patient exam as well as relevant medical history.

More Informed Decision Making
Using VisualDx allows residents to benefit from visual learning coupled with textual reference for stronger learning habits and more informed decision making.

Our Goal:
Improve dermatology pattern recognition among internal medicine trainees, leading to improved physician confidence, diagnostic accuracy, and patient care.

Advantages to Computer-Based Learning with a CDSS

VisualDx presents each condition visually, including variation in presentation due to severity, age, and skin type.

With VisualDx, the user enters specific findings based on the patient evaluation. Each entry allows the system to refine the differential, leading with those conditions most relevant to your patient’s findings.

Internet-based application gives you access anytime, anywhere and allows real-time content additions and updates.

Teaching Specialty Medicine Without the Specialist
The internal medicine academician becomes well rehearsed in basic morphology through the use of an interactive morphology tutorial and then leads rounds moving forward, thus allowing the internal medicine educators to teach specialty medicine without having the specialist available.


* Art Papier MD is the chief scientific officer and founder of Logical Images, Inc., the creators of VisualDx.

For more information on VisualDx, visit our Web site at www.logicalimages.com or contact us at 800.357.7611.

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