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The Open Dermatology Journal, 2012, *6*, 51-54 51

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Towards Developing Strategies to Reduce Health Care Costs in Dermatology

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Abstract: *Background*: The American Board of Internal Medicine has challenged medical specialties to develop "Top Five" lists in order to identify potential areas of wasted health care resources. The American Academy of Dermatology has not yet developed a "Top Five" list.

Objective: To provoke discussion on the need for more evidence, guidelines, and quality measures to reduce waste in Dermatology.

Methods: Dermatologists and medical professionals attending the 2010 Cochrane Skin Group Annual meeting were invited to complete a short-answer survey.

Results: The study had a response rate of 39% (n=24). Most responses fit under a common theme related to the lack of, and poor adherence to evidence-based guidelines including lack of randomized controlled trials for treatment of prevalent skin disease, use of expensive biologics, antibiotics or procedures when cheaper treatment alternatives exist, the use of screening or diagnostic procedures for diseases for which no effective treatment exists, inappropriate diagnostics (biopsies, allergy tests) or treatments (excision of benign lesions, inappropriate Mohs surgery) of skin diseases and lastly, inappropriate dermatology referrals from PCPs.

Limitations: The survey sample is small and limited to a small subset of medical professionals familiar with dermatology. While not definitive the survey results inspired this commentary and provided an initial basis for further discussion.

Conclusion: This commentary and survey are intended to encourage discussion regarding development of a "Top Five" list of ways to improve dermatology quality and efficiency.

Keywords: Quality, efficiency, evidence-based medicine, health care reform, ethics, economics.

INTRODUCTION

In 2011, The American Board of Internal Medicine and National Physicians Alliance challenged primary care physicians to develop lists of five activities to promote more effective use of health care resources [1, 2]. Published in the Archives of Internal Medicine [2], these evidence-based lists promote affordable, high-quality health care by improving treatment, reducing risk, and, when possible, reducing costs [2]. Howard Brody's 2010 editorial in the New England Journal of Medicine simultaneously challenged each medical specialty to develop top-5 lists of the most wasteful diagnostic tests and treatments as a starting point for demonstrating to the public that quality and efficiency can be synonymous in healthcare [3]. These ongoing efforts are manifested online by the Choosing Wisely website [1], which aims to foster discussion between patients and physicians about the utilization of healthcare resources that are scientifically based, free from harm, and necessary [1].

Table 1. Demographics of Survey Participants

Dermatologists	15
Researchers	2
Medical Students	2
Rheumatologist	1
Primary Care Physician	1
Epidemiologist	1
Managing editor	1
Medical Social Worker	1

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1874-3722/12

Table 2. Survey Results and Corresponding Categories

Absence of good RCTs in prevalent skin disorders	Better Evidence Based Practice and Adherence to Existing Guidelines (21)
Inappropriate drug selection	
Failing to use epinephrine in distal locations to help control bleeding, extra time to contain bleeding	
Twice daily as opposed to once daily topical corticosteroids	
Ineffective treatments	
Stopping anticoagulation prior to surgery -- stopping it increases risk of adverse reaction, consult with PCP to stop it is a waste of time	
Medications with minimal benefit compared with cheaper alternatives	
Short term and not long term studies in psoriasis	
Treatment of most Actinic Keratosis	
Biologic drugs for psoriasis when retinoids, MTX... have not been tried	
Shotgun approach to therapy based on single case reports of diseases that may have spontaneous remissions as part of their clinical course	
Screening or diagnostic procedures where no effective treatment exists	
Most acne treatments - they don't clear acne apart from isotretinoin	
Use of biologics in psoriasis before less expensive alternatives have failed	
Branded topical drugs equivalent to generics	
Branded doxycycline and minocycline drugs for acne	
Biological agents	
Prescribing medications for which there is no evidence	
Wart treatment	
Treatment of toenail fungus	
PDT for AKs	
Research compliance requirements	Systemic Healthcare Inefficiencies: Insurance, Medicare, Research, Malpractice (16)
Discrepancies between practice and science	
Administrative tasks for insurance reimbursement	
Complying with regulations for lab, nursing, clerks	
Effort wasted in obtaining prior authorizations for topical meds	
Staff time re Obtaining insurance approval for Procedures	
Staff time re Rx changes due to insurance non-coverage	
Time spent on prior authorization	
Staff time with paper records	
Regulations concerning the use of Accutane	
Malpractice rates without Tort Reform	
Paper record storage	
Expensive gene rearrangement tests and other tests to secure a diagnosis of CTCL	
Contracts	
Defensive medicine	
Billing insurance	

(Table 2 contd…..)

Excision benign lesions	Fraud, Waste and Abuse (14)
Treatment of multiple benign actinic keratoses and pretending that they are skin cancer	
Mohs for low-risk NMSCs	
Greed in private practice	
Professional fees for dermatologists	
Unnecessary biopsies	
Treatment of AKs or NMSCs in elderly patients with low life expectancies.	
Routine allergy tests for people with chronic urticaria	
Unnecessary investigations	
Total body skin exams in individuals at low risk for skin cancer	
Mohs for small tumors	
Topical barrier devices for atopic dermatitis	
Complex surgical repairs (when simple ones would suffice)	
Biopsy of benign lesions	
Antiwrinkle creams	Cosmetic Emphasis in Dermatology (14)
Cosmetic procedures	
Training dermatologists (at great cost to the health system) who will ultimately spend large portions of their professional efforts doing cosmetic procedures	
Micro-dermabrasions	
Bleaching therapy people from African descent	
Lasers	
Cosmetic surgery	
Cosmetic procedures with minimal benefit	
Treatment of wrinkles	
Treatment of signs of natural aging process	
Cosmetics	
Multiple body washes	
Cosmeceuticals	
Cosmeceuticals	
Delayed referral to dermatologist- inpatient	Improved Patient and Primary Care Provider Education Regarding Screening, Medication, Procedure Use (8)
Mohs surgery for chest and back skin cancer	
Non-attendance OPD/therapy visits	
Prioritizing pigmented lesions from the worried well with a low diagnostic yield	
Unused medications	
Yearly visits to dermatologists specifically for total body skin examinations by people with no excess risk factors	
Over utilization for specialty service that should be handled in primary care	
Delayed referral to dermatologist- outpatient	
Revamping of old products into different % age combinations for business purposes rather than concentrating on new therapeutics.	Pharmaceutical Industry (6)
Research in wrinkles	
Money from companies given to marketing and not clinical independent research	
Overpriced drugs including topicals	
Medical conventions with bad information	
Pharmaceutical company spending	

In response to these challenges, nine US medical groups have developed "Top Five" lists to improve healthcare by use of high quality, efficient, and evidence-based medicine [1-3].

The American Academy of Dermatology has not yet taken up these challenges. As a means of exploring the "Top Five" ways to save money in dermatology, medical professionals including dermatologists attending a 2010 international conference on Comparative Effectiveness Research in Dermatology at the University of Colorado School of Medicine were invited to complete an online survey prior to attendance (Table **1**). One survey question asked participants to list the top five wastes of money in the field of dermatology. Twenty-four of 61 attendees replied, yielding a response rate of 39%. Responses were analyzed by three independent authors and catalogued into core themes based upon response frequency (Table **2**).

Lack of, and poor adherence to evidence-based guidelines was the highest response category. Since many of the treatments in dermatology are topical, with local side effects, dermatologists frequently try treatments and combinations of treatments, reaching conclusions on the basis of personal experience or uncontrolled trials [4]. These uncontrolled trials often lead to errors and substantial bias, which is passed onto the patient in the form of inferior healthcare. Specific responses in this category included the lack of randomized controlled trials for treatment of prevalent skin disease, use of expensive biologics, antibiotics or procedures when cheaper treatment alternatives exist, the use of screening or diagnostic procedures for diseases for which no effective treatment exists, inappropriate diagnostics (biopsies, allergy tests), or treatment (excision of benign lesions, inappropriate Mohs surgery) of skin diseases. Another important response involved inappropriate dermatology referrals from PCPs, which could be improved by patient and primary care provider (PCP) education regarding screening and management of skin disease.

In conclusion, there is a broad spectrum of quality and cost-related inefficiencies in dermatology. While our survey is small and limited to a self-selected sample, the results are meant to initiate a discussion of those areas of waste in dermatology that could be reasonably condensed into a "Top 5" list congruent with those of other medical organizations [1, 3]. For example, the American Academy of Allergy, Asthma, and Immunology (AAAAI) has developed a one-page list of "Five Things Physicians and Patients Should Question", which specifically identifies unnecessary tests and treatments common to this specialty [5]. This list was created by an AAAAI taskforce that incorporated scientific evidence, membership feedback, and expert opinions into its recommendations [5].

There will no doubt be objections that more research is needed before a list such as this can be developed for the field of dermatology. As Brody notes in his editorial, however, "…no matter how desirable more research is, we know enough today to make at least a down payment on medicine's cost-cutting effort…we should at least begin where we can…. A Top Five list also has the advantage that if we restrict ourselves to the most egregious causes of waste, we can demonstrate to a skeptical public that we are genuinely protecting patients' interests and not simply "rationing" health care, regardless of the benefit, for cost-cutting purposes" [3]. There is an urgent but achievable need for comprehensive health care reform in the United States [6]. Once a Top Five list has been agreed upon, plans for educating dermatologists can be created and encouraged by organizations such as the American Academy of Dermatology. Dermatologists contribute to this effort by advocating for better treatment guidelines, educating patients and PCPs, and implementing high quality, cost-effective, evidence-based treatment into their clinical practice.

CONFLICTS OF INTEREST

The opinions expressed in this article represent the views of the authors and not of the United States government.

ACKNOWLEDGEMENTS

The authors would like to thank Maggie Cook-Shimanek, MD, Rosemary Highart, MD, Lauren MacLaughlin, Chad Vogeler, Brian Petersen, Daniel Sugai, Jill Feetham, and Laurel Geraghty for their valuable comments and insight in reviewing the manuscript.

FINANCIAL DISCLOSURE

This study was funded by a $20,000 NIAMS R13 conference grant (R13AR059425). The Veterans' Administration provided financial support for the study (Dr. Dellavalle). The sponsors had no role in the design or conduct of the study; in the collection, analysis, or interpretation of data; nor in the preparation, review, or approval of the manuscript.

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Received: August 25, 2012 Revised: October 10, 2012 Accepted: October 10, 2012