Controlling Health Costs: Physician Responses to Patient Expectations for Medical Care

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BACKGROUND: Physicians have dual responsibilities to make medical decisions that serve their patients' best interests but also utilize health care resources wisely. Their ability to practice cost-consciously is particularly challenged when faced with patient expectations or requests for medical services that may be unnecessary.
OBJECTIVE: To understand how physicians consider health care resources and the strategies they use to exercise cost-consciousness in response to patient expectations and requests for medical care.
DESIGN: Exploratory, qualitative focus groups of practicing physicians were conducted. Participants were encouraged to discuss their perceptions of resource constraints, and experiences with redundant, unnecessary and marginally beneficial services, and were asked about patient requests or expectations for particular services.
PARTICIPANTS: Sixty-two physicians representing a variety of specialties and practice types participated in nine focus groups in Michigan, Ohio, and Minnesota in 2012
MEASUREMENTS: Iterative thematic content analysis of focus group transcripts
PRINCIPAL FINDINGS: Physicians reported making trade-offs between a variety of financial and nonfinancial resources, considering not only the relative cost of medical decisions and alternative services, but the time and convenience of patients, their own time constraints, as well as the logistics of maintaining a successful practice. They described strategies and techniques to educate patients, build trust, or substitute less costly alternatives when appropriate, often adapting their management to the individual patient and clinical environment.
CONCLUSIONS: Physicians often make nuanced trade-offs in clinical practice aimed at efficient resource use within a complex flow of clinical work and patient expectations. Understanding the challenges faced by physicians and the strategies they use to exercise cost-consciousness provides insight into policy measures that will address physician's roles in health care resource use.

KEY WORDS: physician stewardship; cost-conscious care; health care costs; physician decision-making.
J Gen Intern Med 29(9):1234–41
DOI: 10.1007/s11606-014-2898-6

INTRODUCTION

Almost every time a physician recommends, prescribes or delivers a health care intervention, the physician is authorizing the use of a medical resource, the supply of which is limited. Their judgments about whether to prescribe a medication, procedure or referral are based on the value of those health services to an individual patient's circumstances, needs and preferences.[1] In this role, physicians are often the final arbiter regarding the wise and efficient use of medical resources.[2]

Wasteful medical practices have been documented in virtually every aspect of medical care,[3–6] accounting for nearly 30 % of all medical expenditures.[7] Recent policy interventions that aim to encourage more cost-efficient practice among physicians include promoting transparency (publishing cost or quality outcomes), pay for performance, payment bundling and shared financial risk models. For instance, accountable care organizations (ACOs) and patient-centered medical homes that meet performance standards for quality, patient-satisfaction, and spending targets will be eligible for financial rewards.

Similarly, virtually every physician professional organization has called on physicians to exercise resource stewardship. The Charter on Medical Professionalism, endorsed by more than 100 professional groups, requires commitment to a "just distribution of societal resources."[8] The American Medical Association's *Code of Medical*

Electronic supplementary material *The online version of this article (doi:10.1007/s11606-014-2898-6) contains supplementary material, which is available to authorized users.*

Received October 21, 2013
Revised February 25, 2014
Accepted May 7, 2014
Published online May 29, 2014

Ethics calls on physicians to make fair, prudent, cost-conscious decisions, while maintaining the physician's primary responsibility to patients.[9] Likewise, the "Choosing Wisely" campaign aims to educate the public about the overuse of tests and treatments, and has been endorsed by more than 30 specialty societies.[10]

Controlling costs at the provider level may be justifiable, but only if patients are involved in the decision-making process.[11] However, in many instances, patients are opposed to physicians considering costs,[12] and physicians, while they almost unanimously endorse the responsibility for constraining resource use, struggle with how to do so while serving their patients' best interests. For example, in a recent survey, 85 % of physicians agreed that "trying to contain cost is the responsibility of every physician;" however, more than three-quarters also agreed they "should be solely devoted to their individual patients' best interests, even if that is expensive."[13] Cost-conscious practice is particularly challenging when physicians are faced with patient expectations or request for medical services that may be unnecessary. Previous studies have demonstrated that patient requests influence physician behavior, even after controlling for predisposing factors and the underlying necessity of the request.[14,15] For example, more than one-third of U.S. physicians would order a magnetic resonance image (MRI) for back pain in response to patient request even when the MRI was unnecessary.[16] Surveys of California physicians,[17] primary care physicians,[18] and oncologists[19] reflect similar tensions between physicians' perceived responsibility to practice cost-consciously and their desire to satisfy their patients' expectations.

Despite expert guidance from professional organizations and policy reform, little is known about how U.S. physicians operationalize their responsibilities for wise resource use in their interactions with patients. In this study, we sought to understand how physicians consider resources, their experiences with patient requests and expectations, and the strategies they employ to manage those requests.

METHODS

Study Population

In 2012, we conducted nine professionally facilitated focus groups of physicians (n=62) in Minnesota, Michigan and Ohio. We recruited a convenience sample of physicians, aiming to include those from varied specialties and practice settings and with a range of practice experience. Physicians were recruited by mail, flyers, newsletters, including email newsletters, and personal contacts to participate in a focus group discussion on "how doctors experience, manage and think about caring for patients when resources are limited." Four focus groups comprised physicians from academic medical centers, four were from community centers, and one included physicians attending a continuing medical education course. Physicians were excluded if they practiced less than half-time or had completed residency in the last 2 years.

Focus Groups

A comprehensive literature review of physicians' attitudes and behaviors regarding their role in controlling health care costs informed the development of a semi-structured moderator guide. The guide was then pretested using cognitive interviews with physicians in full-time practice (Moderator Guide available in the online appendix). Professional moderators were instructed to solicit broad participation and encourage physicians to describe their practice-based experiences. Participants were prompted to discuss experiences with redundant, unnecessary and marginally beneficial services, and were asked about patient requests or expectations for particular services. They were probed to discuss how they perceived resource constraints—including costs to patients, other stakeholders and society.

Data Analysis

Focus groups were recorded and professionally transcribed verbatim. Our analysis blended conventional (text-based) and directed content analysis,[20] the latter based on the literature review that informed the moderator guide. Each coauthor read two transcripts and noted potential themes related to physicians considering costs or other resources. The entire team discussed these themes to devise a preliminary coding scheme, which was then applied iteratively to additional transcripts followed by further team discussion to develop a working coding scheme. Two investigators then applied the working coding scheme to all the transcripts, adding new codes when they agreed on additional themes. The final codebook included definitions of each code, inclusion and exclusion criteria, and examples. To further enhance validity, each author analyzed four transcripts (three researchers per transcript) using the finalized codebook; differences were discussed and resolved by the team.[21] Since this study of physicians included physician investigators, participant feedback was considered unnecessary. Representative quotes for each major theme are presented below. Physicians completed a short demographic survey prior to each focus group in order to provide descriptive statistics of the study sample. Participants were not individually identified during focus group transcription, therefore, not all of the descriptors from the surveys could be linked

to each speaker. Consistently available descriptors (gender, practice type, and specialty) for the physician speaker are provided in parentheses after each quote.

RESULTS

Characteristics of the participants are shown the Table 1. While participants came from a range of specialties including primary care, pediatrics, emergency medicine, oncology, cardiology, gynecology, neurosurgery, and orthopedics, the majority were primary care physicians (66 %). Slightly more than half (56.5 %) were male and 58.1 % had graduated from medical school more than 20 years ago. Compared to the population of all US physicians, our sample contained more primary care physicians, physicians practicing in academic environments and women.[22]

Patient Expectations and Requests

Many respondents reported requests for unnecessary tests and treatments from patients. As one physician noted: "They're coming in for something, not just advice…they put in a co-payment and they expect tests be done, prescriptions be written, so it's almost like, 'I came in for this, and I really want my product'," *(female, academic practice, primary care)*.

Physicians described factors they perceived were driving patient requests for testing or treatment, including anxiety, information from the internet and other media, and the medical experiences of family and friends. For instance, one primary physician described the "*Ladies Home Journal* Effect" stating that when a prominent talk show (e.g., Oprah, Dr. Oz) or magazine featured a specific medical condition or test, that his practice "predictively gets barraged with requests for those tests within a few days" *(male, academic practice, family practice)*.

The lack of out-of-pocket cost was perceived to be an important motivator for patient requests. Physicians commented that some patients do not have "skin in the game" and are often unwilling consider costs: "I actually don't think patients want to hear about the cost…unless they're paying by themselves*" (male, community practice, specialty unknown)*. Or, as another put it:

> "If I'm a patient…the dumbest reason in the world not to get an MRI is because it is expensive…That makes no sense to me whatsoever because my shoulder hurts. Now, if you tell me that it is not going to make my shoulder better, that is a better reason. If you tell me that I'm going to get exposure to something that is going to cause damage, okay… But telling me it costs too much, I'm going to laugh at you…That is where I'm going to pull out my insurance statement (male, academic practice, primary care)."

Physicians described how patient demands often challenged their ability to provide cost-conscious care: "I have a lot of patients that demand to have MRIs done. And then I have to tell them why they may or may not, and some people do not deal with that well. So it comes to kind of a conflict" *(female, academic practice, primary care)*.

Physician Consideration of Resources

Physicians considered a variety of financial and nonfinancial resources in their clinical decision-making. Many reported a willingness to consider the cost of medical decisions when patients raised financial concerns or when physicians anticipated significant personal cost to the patient. For example, one physician said: "I mean, as much as I would like to say it doesn't matter whatsoever, if someone comes in and is under- or uninsured, you really think about everything you're doing" *(female, academic practice, cardiology)*.

Physicians also considered other costs for the patient, including time, convenience, and discomfort. For instance, one pediatrician discussed prioritizing different resources, here out-of-pocket expenditures and missed work, to tailor her care: "Yes, [cost] does influence, I'm much more deliberate about my work-up for [uninsured patients] than I am for someone who's on insurance…cause I know they've

Table 1. Participant Characteristics

	Number (%) N=62
Location	
Michigan	14 (22.6 %)
Ohio	16 (25.8 %)
Minnesota	32 (51.6 %)
Gender	
Female	27 (43.5 %)
Male	35 (56.5 %)
Years since graduation from medical school	
0–5	7 (11.3 %)
6–10	8 (12.9 %)
11–15	5 (8.1 %)
16–20	6 (9.7 %)
>20	36 (58.1 %)
Practice Type	
Academic	39 (62.9 %)
Community	23 (37.1 %)
Specialty	
Family Medicine	20 (32.2 %)
Internal Medicine	9 (14.5 %)
Pediatrics	3 (4.8 %)
Primary Care	9 (14.5 %)
Emergency Medicine	3 (4.8 %)
Oncology	2 (3.2 %)
Geriatric	1 (1.6 %)
OB/GYN	2 (3.2 %)
Cardiology	2 (3.2 %)
Orthopedics	1 (1.6 %)
Neurosurgery	1 (1.6 %)
Unknown/No Response	9 (14.5 %)

gotta pay out of pocket…Whereas with an insured person, if their time is the most valuable thing, then I'll do more at once" *(female, community practice, pediatrics)*. Commonly, patient concerns were given greater weight in clinical decision-making than limiting the costs of medical care. One physician acknowledged that he would order more blood tests, even potentially unnecessary tests, for patient convenience: "I would say that I'm more driven by sticking the patient [for a blood test] the second time or having them drive in from home than the price tag on the test" *(male, academic practice, primary care)*.

Besides patient time and trouble, physicians considered time and lost productivity for themselves and their staff when making medical decisions. This physician, considering whether to repeat a test done elsewhere, described the trade-off: "I can pay a secretary $15 an hour to keep making phone calls, or I can just repeat the test*" (male, community practice, unknown specialty)*. Time constraints were often cited as a major reason why physicians acquiesced to patient requests for unnecessary care. For example, an emergency physician commented, that he could only "fight" with patients who demanded a computed tomography (CT) scan for a few minutes before he realized he would "order it anyway" *(male, community practice, emergency medicine)*.

The relative cost and burden of patient requests and expectations also influenced physician trade-off decisions. Here, an internist weighed the cost of a test against her own time investment:

> "… a patient wants a TSH added to her labs and you have no idea why…but trying to find out is going to take you 20 minutes of talking to her about how her hair is falling out on top of her head, and then you will order the TSH anyway. So you just say, "okay," don't you? It's a TSH as opposed to a MRI, so you kind of pick your battles (female, community practice, primary care)."

In contrast, an oncologist considered the time required to talk to patients about the frequency of follow-up imaging important to avoid repeated requests and discussion in the future: "They all want scans…I had a woman tell me she wanted a mammogram once a month…and it's a talk I have with almost everyone, about why we don't do scans. It takes a good 20 minutes to get through that talk" *(female, academic practice, oncology)*.

Besides time constraints, concerns about liability and the pressures of running a business hindered physicians' willingness to consider costs and modified how they responded to patient requests. Medico-legal risk clearly influenced ordering more tests or appeasing patient wishes:

> "There are sticks and the carrots, right. I mean the sticks for ordering an X-ray or MRI are very minimal. [Insurer] doesn't call you and say, why did you order this X-ray/MRI? Somebody calls you when you miss the diagnosis of cancer…Checking the box is actually very easy and then you don't go home at night thinking about all the boxes you didn't check (male, academic practice, emergency medicine)."

Sometimes physicians, like this surgeon, simply refused to consider resources at all because of liability:

> "I do trauma call…I don't care that they probably don't have any sort of abdominal injury. They're drunk and I can't tell. They're getting scanned from head to toe, cause I'm not going to be liable for missing something because I got an exam that's obscured by the guy being completely [drunk]. So I save nobody money. The residents ask, does he really need it? I go, my job isn't to save money, it's to cover my buttocks (male, community practice, surgery)."

Several physicians expressed concern that practicing cost-consciously would adversely affect their business and their ability to satisfy their patients. For example, one physician commented that many independent physicians feel pressure to avoid negative reviews on internet sites dedicated to consumer ratings of local business, and described the often transactional nature of the physician–patient relationship: "It only takes one of those to ruin a reputation, and you can't do anything about it…So I think a lot of docs, they're like, 'hey I'm trying to maintain a small business here, as well as a practice…and I have to make my service industry happy'," *(male, community practice, urogynecology)*. As a result, physicians' decisions to prescribe therapies or order services that are expected by patients often reflect their need to maintain high patient satisfaction and a thriving practice.

Cost-Consciousness Strategies Exercised By Physicians

Many physicians described strategies they employed to exercise cost-consciousness in their clinical practice and address patient requests or expectations. These included education strategies, trust-based strategies, and substitution strategies.

Education Strategies

Education strategies used by physicians comprised a spectrum of techniques that ranged from simple education about a disease process or a treatment, to more comprehensive discussion of associated risks and benefits, relevant

guidelines, and costs. These conversations sometimes satisfied patient expectations and requests for care. For example, physicians appealed to radiation exposure, downstream interventions, and other risks, as one physician stated: "They will listen when you tell them this could generate more rectal exams and a biopsy" *(male, academic practice, primary care)*. Physicians also described appealing to guidelines, both as an educational tool and as a constructive way to refuse a patient's request for an unnecessary test. As one physician mentioned:

> "I can show [patients] the guideline and the scoring system—'let's compute your risk factors for how much your risk is over ten years'—And that causes them to back out a little bit and not push on for you to order what you think might be unnecessary testing *(female, academic practice, primary care)*."

Physicians differed in their approach to cost discussions with patients. In some cases, physicians explicitly addressed the costs of care. For example, one physician mentioned: "And I'm surprised at the number of people who are swayed by the cost discussion, not because they have bad insurance, but because they also feel some responsibility. So, I think bringing up the cost at least to some patients is a useful strategy…" *(female, academic practice, oncology)*. However, others highlighted the difficulty of cost discussions: "It's quite difficult to talk to a patient who is only spending someone else's money. About money they feel personally assaulted, 'I'm not worthy, then, you say?' They are very willing to talk if it's their money, but if it someone else's money, it is often a delicate discussion" *(female, community practice, primary care)*. Instead, many physicians chose to avoid cost discussions altogether. This physician, talking about options for treating back pain, emphasized outcomes and complications of surgery, "I usually don't use the word cost in that discussion, even though that's in the back of my head" *(male, community practice, primary care)*.

Trust-Based Strategies

Physicians often mentioned the importance of trust in managing patient expectations. Those who had ongoing relationships with patients often relied on that relationship when responding to an inappropriate request: "So, if you have that kind of rapport with your families, with your patients, where they do appreciate your input and trust you, then you can kind of stem that" *(male, community practice, pediatrics)*. Similarly, a neurosurgeon mentioned: "If it's a patient I've known for years, I can commonly convince them to do the right thing" *(male, community practice, neurosurgery)*. Some physicians occasionally ordered an unnecessary test or treatment requested by their patient with the explicit intention of building trust. One pediatrician said she may order a complete blood count (CBC) for a viral illness and, consequently, have greater influence during future encounters: "In my practice, I'm building trust with the family. So, I may do this with her one child, but the other four children won't need it because she'll trust that my judgment was right in the first place…" *(female, community practice, pediatrics)*. Physicians also recognized that alleviating patient anxiety often led to greater patient trust, as in the following statement: "But if you got an anxious parent in front of you, and for the price of the X-Ray you're gonna give them a good night sleep, then I'll go ahead and X-Ray" *(female, community practice, pediatrics)*.

Shared decision-making was an important strategy utilized by physicians that blended elements of education and trust building. For example, one physician described efforts to tease out the patient's underlying motivation: "I specifically ask them "What is it that you really want from me? And they say, "I wanna make sure that I don't have lung cancer," so something will come out eventually" *(female, community practice, cardiology)*. Another pediatrician explained his strategy to engage patients: "I always give parents the options of what we can do and within those options—'What would you like to do?' I try and make it collaborative" *(male, community practice, pediatrics)*.

Physicians reported that investing time up-front in shared-decision making resulted in long-term benefits: "But, I think one positive thing that could come out of shared decision-making is that if the patient feels heard and listened to and validated, they are probably going to be less likely to push for a test" *(female, academic practice, primary care)*. Occasionally, physicians advocated caution in what options might be discussed with patients and families. For example, this physician, speaking about end-of-life care said: "I think that there isn't enough restraint in telling patients what all of the options on the table are…Why would you tell somebody that putting in a percutaneous endoscopic gastrostomy (PEG) is an option when you and I all know that the PEG is a bad idea in every possible way. Why would you offer that? And, once you let that cat out of the bag, it is extremely hard to get it back in" *(female, community practice, primary care)*.

Substitution Strategies

Physicians described cases in which they weighed the merit of individual requests and sometimes chose to substitute less costly alternatives. This included both a direct exchange of one test or treatment for another, as one physician described: "Even throat cultures, they're over $100 for the PCR, penicillin is dirt cheap. So I think I just

treat more patients than maybe I should" *(female, community practice, primary care)*. However, physicians also reported reducing the frequency of office visits, specialist consults, or repeat testing. Some physicians stretched guidelines to limit patient costs: "I try to be reasonable. If the recommendation is to monitor this nodule for two years, every three or four months, I say we can extend that between four and six months, and then, instead of two years, maybe eighteen months" *(female, community practice, cardiology)*.

Deferral strategies represented a form of substitution used by some physicians, especially those with ongoing relationships with patients. In these cases, physicians substituted a "wait and see" approach for immediate treatment or testing. For instance, one pediatrician reported a common scenario in her practice of a child with croup, stating: "it's croup…but those parents are just convinced this kid has pneumonia. They want that chest X-ray. A lot of times I just see them back the next day" *(female, community practice, pediatrics)*. Another physician stated that instead of testing or prescribing antibiotics for a likely viral respiratory infection, she would write prescriptions for tasks or home-care remedies that patients could follow: "I will write a note on it for colds–'this is what you need to do'. And then they feel at least you did something" *(female, academic practice, primary care)*.

DISCUSSION

Our focus groups highlight how physicians consider resources and the strategies they use to practice cost-consciously when faced with patient expectations for medical care. Physicians' approaches to resource stewardship reflected a complex decision-making process that balanced resource constraints with needs and requests of patients. Their willingness and ability to practice cost-consciously appeared to vary depending on patient attributes, personal risk, and the relative expense or cost-worthiness of individual requests.

Previous research has clearly demonstrated that physicians' perceive a tension between their responsibility to practice cost-consciously and their ability to serve their patients' best interests,[13,17–19] which often manifests in a desire to fulfill their patients' expectations.[5,14–16] Our data suggest that physicians do consider resources in the daily care of patients, but some may be more adept at balancing this tension than others. We found that physicians viewed decisions not only through the lens of the financial costs of care, but also as trade-offs between a variety of competing financial and nonfinancial resources. They considered the time and convenience of patients, their own time constraints, and logistics of maintaining a successful practice. They consciously weighed the relative cost of alternative services in their clinical decisions. Sometimes, they made trade-offs that conflicted with guidelines (as in the case of the physician who provided empiric antibiotic therapy for pharyngitis). Other times, they used guidelines to validate their opinions with patients.

Some physicians described skillful handling of patient expectations and requests. They employed strategies such as shared decision-making, deferral of treatment with specific instructions for self-care and close follow-up, and substituted less costly alternatives when appropriate. Moreover, they did not utilize a single strategy or one-size-fits-all approach, but adapted their management to the individual patient and clinical environment. However, cost-conscious practice and skillful communication was not uniform. Some physicians commonly acquiesced to inappropriate patient demands out of expedience, or prescribed unnecessary tests or treatment solely to relieve anxiety, strategies which do not usually reflect wise use of resources. In many cases, these same physicians recognized their responsibility to practice cost-consciously, but perceived barriers such as medico-legal risk, time constraints, and the pressures of satisfying patient-customers to be too great.

The findings of this study are significant given the emergence of ACOs, medical homes, and other models of care that seek to improve quality and coordination of health services. As a result, there will be new opportunities to encourage cost-conscious practice among physicians. Payers could reward physicians and practices that spend additional time engaged in patient education and shared decision-making—a strategy that holds promise and potential pitfalls.[23,24] Such incentives may also extend to time spent in phone or e-consultations aimed at providing patient education, or, in certain cases counseling delivered by trained ancillary staff.

Initiatives that target patient demand for unnecessary services will be equally important. For example, some payers are turning toward value-based insurance design utilizing cost sharing arrangements to incentivize consumer choices for clinical services with strong evidence of benefit and discourage use of lower-value, marginally beneficial services.[25–27] Additionally, increasing access to objective health information will help patients sort through the value of different services. For example, the Choosing Wisely campaign focuses on common low-value services and encourages physicians and patients to discuss tests and procedures that may be unnecessary.[10]

Our data also highlight the challenge of finding appropriate measures of cost-efficient practice with which to compare physicians. While an extensive body of literature has demonstrated wide variation in resource use between individual physicians and hospitals,[28–30] such studies fail to capture the context and complexity within which that utilization occurs. As our results show, sometimes physicians are practicing judiciously but considering all resources, not just financial costs. Other times, they are

responding to their local practice climate and patient population. These nuanced resource trade-offs may not be adequately captured in current physician profiling measures or reimbursement policies that rely on administrative data alone. A seemingly frivolous blood test might actually be a cost-conscious decision that avoids an MRI or the time cost of medical personnel. As a result, developing practice performance measures that will account for these nonfinancial and contextual factors will not be easy.

Finally, encouraging physicians to practice cost-consciously will require more than financial "sticks and carrots" and ethical guidance from professional societies. Our data suggest that physicians need practical resources, strategies and skills they can use to manage patient expectations and requests, including ways to appropriately use clinical guidelines and decision aids, techniques to engage in shared-decision making, and the effective use of communication to build trust with patients. Communication skills have not always been a strength of medical providers,[31] and pose even greater challenges in the controversial area of cost.[32] However, some programs have been shown to improve patient-centered communication during medical training and later during professional practice.[33] These and other educational interventions could be adapted to promote better conversations between physicians and patients about wise resource use.

Our study has some important limitations. First, our focus groups were a convenience sample of Midwestern physicians and our findings may not apply to physicians practicing in other areas, although prior research demonstrates that physicians from disparate regions consider costs.[34] It is possible that our sample included physicians who are more concerned about costs, and their views and practices may not be representative of the average physician. Second, while we attempted to recruit a variety of specialists, two-thirds of our participants were primary care physicians. There may be important differences between specialists (e.g., surgeons vs. medical specialists), as well as between specialists and primary care physicians, that could be studied in future research. Lastly, while our study was designed to explore many factors that contribute to inefficient care, specifically asking about physician experiences with patient requests may have focused disproportionate attention on patients as a source of overused services.

Understanding the challenges faced by physicians and the strategies they use to exercise cost-consciousness provides insight into policy related to physicians' roles in addressing health care resource use. Future research and policy efforts to promote cost-efficiency among physicians must reflect the real world of medical practice that relies on complex interactions between physicians and patients, and the many trade-offs physicians make in the provision of medical care.

Acknowledgements: *The authors would like to thank Greenwall Foundation for the support of this work.*

Conflict of Interest: *The authors declare that they do not have a conflict of interest.*

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