The Prudent Layperson's Complicated and Uncertain Road to Urgent Care

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This issue of *Annals* reports an analysis by Ho et al[1] of billing data from a commercial insurance company, comparing visit trends and charges between hospital-based emergency departments (EDs) and freestanding EDs in Texas. Technical aspects of this analysis and its implications are discussed at length in other editorials in this issue.

During the journal peer-review process, much attention is typically paid to technical and methodology issues, often with pages of discussion about specific models or statistical tests. Yet often the biggest limitation of a study is not those technical details but simple errors or omissions of logic that require no technical expertise to understand. This article is a good example. The financial and volume data are useful for direct comparisons between freestanding EDs and hospital-based EDs, despite the complete lack of clinical details. But the article also includes conclusions about processes that were not directly studied and for which there was no good comparator, namely, whether patients with low-acuity complaints could have been treated in other outpatient environments at much less cost. These conclusions in particular have attracted by far the greatest interest by lay media. (Like the article by Ho et al, this editorial does not separately discuss patients who are frequent users of the ED.)

For more than 50 years, patients with low-acuity complaints have come to the ED instead of an urgent care clinic or equivalent, and it has repeatedly been recommended by experts that these confused or uninformed or manipulative individuals stop doing this. Some insurers are advocating retroactively refusing payment for such "inappropriate" visits to the ED.[2] Obviously, efficient and appropriate use of health care resources by low-acuity patients is desirable and should be encouraged, but it is crucial that obstacles be minimized, triage be appropriate, and care be of high quality. When large numbers of people continually persist in following a practice that seems to defy logic, it usually means we are failing to fully and accurately understand the nature of the problem.

Those making recommendations about "inappropriate" ED visits almost always do so in very broad generalities, but thinking it through in detail from the patient's perspective changes the perspective substantially. Let's imagine a prudent layperson who has a complaint such as fever or headache or abdominal pain that he or she wants evaluated the same day, but doesn't really think is a major emergency. Let's examine what conditions would be necessary (but not individually sufficient) for him or her to instead head to the urgent care center or physician's office instead of an ED, and what decisions that person would have to make to get there. Those decisions are very simple, aren't they? Or…maybe not.

1. Has the patient's destination been predetermined? Every ED population has always had a segment of patients with apparently minor complaints who appear better served in a lower-acuity setting. However, there's a good chance many of them have already been directed specifically to the ED by a provider or already tried alternatives on their own. Thirty percent of patients treated in a large ED in the United Kingdom had been sent there by their physicians.[3] Another 16% came to the ED because their primary physician was not available. The most common reasons given for coming to the ED instead of a lower-acuity location included needing reassurance from an MD (32%), thinking a radiograph was needed (29%), having a high level of confidence in the ED (26%), and having nowhere else to go that had 24-hour access (24%). In 3 Canadian EDs, 60% of patients with less acute triage acuity scores presenting during weekday office hours had sought other sources of care first, and of the 47% who called their physician, two thirds were told to go to the ED.[4] These patients are therefore already in the ED for reasons mostly not under their control (which perhaps reflects pertinent clinical details not obvious from just a presenting chief complaint). Any credible analysis of which patients can be

redirected from the ED should always exclude those who have already tried alternative solutions and thus are no longer candidates for redirection. But this variable is not even mentioned in most studies on this topic (including the one by Ho et al).

2. Can the classic prudent layperson accurately assess the severity of his or her medical needs and the level of treatment facility he or she should seek? This concept, fundamental to a recommendation of self-triage to a lower level of care, has never been researched. However, ample data do exist about the ability of trained, professional health care providers in EDs to make that same assessment, and it is not encouraging.[5] Half of the top 10 presenting complaints were identical for patients identified at triage as urgent versus nonurgent. Among the 7.5% of patients triaged as being at the lowest acuity, 48% nonetheless required some diagnostic test, including 28% requiring any type of imaging, and 32% requiring a procedure; 4.4% of these low-acuity patients were admitted to the hospital (with average length of stay of 5.3 days), including some who went directly to critical care, the operating room, or the catheterization laboratory. Another study compared the presenting complaint of patients assessed as appropriate for primary care treatment, using a validated algorithm, with their actual ED clinical course and final diagnosis.[6] Presenting complaints did not differ between more and less acute ED patients and were very poorly related to discharge diagnosis. Among these patients thought appropriate for primary care instead of the ED (only 6.3% of the total), 11% needed immediate emergency care at presentation, 12.5% had to be admitted as inpatients, and 3.4% went straight to the operating room. Thus, the idea that trained, experienced professionals (much less laypersons without vital sign information) can assess patient disease severity on presentation with a high degree of accuracy has been thoroughly debunked.

3. To make a choice between 2 facilities with capabilities as different as EDs and urgent care clinics, any prudent person would want to be sure that the quality of care and outcome for the complaint would be similar. Does an urgent care visit provide the same diagnostic accuracy and appropriate treatment as an ED visit? The answer is easy: we have no idea. The rigorous research that would make a physician confident in this recommendation has not been done. Urgent care involves less highly trained personnel, with much more limited diagnostic tests and fewer and unstandardized quality metrics. There is no standard definition of urgent care scope of practice; only a few states have a dedicated licensure program for them, and in most states their regulation and oversight are no more stringent than that of a private physician's office. How often is the proper diagnosis or treatment not applied, so that the patient suffers additional morbidity, cost, lost work time, and complications? How often do urgent care patients have to make one or more additional follow-up visits that could have been avoided if they had attended a facility with more resources? How often does the urgent care center find that it cannot handle this patient and send him or her (with additional delays) to an ED anyhow? No credible recommendation about how best to integrate urgent care into the acute care system can be made until we have solid data to answer these questions.

4. Let's ignore all the previous evidence and pretend that a prudent layperson could in fact assess his or her own urgency with a high degree of accuracy and, being financially prudent, decides to seek a less expensive level of care. To be a feasible option, the center should be reasonably nearby; one definition used for proximity in the literature has been "within a 10-mile radius" of their home. Only 29% of the US population is calculated to meet this criterion.[7] This assumes, of course, that this layperson has a car or a ride immediately at his or her disposal, doesn't have to deal with delays or public transit issues, and isn't at a workplace, school, or other location that is not his or her home or near an ED.

5. Is the clinic open? Urgent care clinics are typically open only 50% of all hours (7 days a week). It has been calculated that under optimal circumstances, 13.4% of all US ED visits could potentially be handled by urgent care centers, but after adjusting for the many hours they are closed, this figure decreases to 8.9%.[7] However, it has still not been corrected for the substantial proportion of patients already sent to the ED by their physician. If we make that correction by using the most conservative figure available (30%),[3] that leaves at most only 6.2% of ED visits that, under perfect circumstances and with no other obstacles, could be referred to an urgent care center. These authors estimated that the potential cost benefit of the 8.9% shift (using not just urgent care centers but also even cheaper retail clinics with limited capabilities) would amount to 0.2% of US annual health care spending (in 2010).[7] None of these estimates calculate how many fewer hours the clinics are a realistic option because of conflict with the patient's work, school, child care, and other competing schedules and obligations.

6. Will the urgent care clinic agree to see me? Even if open, urgent care and retail clinics are legally able to turn away patients who have no ability to pay or have the wrong kind of insurance. In this case, they provide no care whatsoever and the patient's time and effort to go there are wasted, resulting either in no treatment at all or the need for a completely separate visit to another type of facility.

This is in contrast to the ED, where protection afforded by the Emergency Medical Treatment and Labor Act means that patients will receive some assessment and treatment no matter what.

7. A study of the effect of retail clinic penetration in ED markets showed no commensurate decrease in low-acuity visits to the ED.[8] Do patients have unconscious cognitive disincentives to choosing urgent care? Counterintuitively, the lower cost may reduce the appeal of urgent care in the patient's mind. Marketing research over many years has amply proven that products with higher price tags are considered more valuable and of higher quality, and perceptions of quality can be manipulated simply by raising the price of a product. This "price placebo" effect pertains to health care as well. Individuals in a study comparing (identical) sunglasses that they were told were either Ray-Ban or a discounted no-name brand scored almost twice as well and performed much faster on visual acuity tests when wearing the (allegedly) prestigious brand.[9] When given a placebo tablet described as a new form of opiate, subjects receiving standardized painful stimuli experienced a degree of relief that was 39% greater if they were told that the pill they received cost much more than the "generic" (identical) version.[10] A similar effect has been shown in patients with Parkinson's disease, who had fewer symptoms when treated with a medication represented as expensive versus the same one that was not.[11] Subjects who solved puzzles after drinking an energy drink scored 19% worse when they were charged only the "discounted price" versus the regular price for the drink, an effect that did not appear to be conscious.[12] Subjects given identical aspirins labeled generic versus brand name and then subjected to a painful stimulus found that the branded version was much more effective. Functional magnetic resonance imaging studies of these subjects showed the "brand placebo" itself activated additional areas of the brain known to be involved in pain control and placebo response.[13]

It is likely that the complexity and potency of rituals of "medical theater" also carry a powerful placebo effect. Other things being equal, many, if not most, patients would prefer to see a physician rather than a nurse, and attend a facility with radiography and pharmacy and laboratory testing over one without. Not only would they feel more confident about the more complex environment but also they might well have better objective outcomes because of the proven efficacy of price placebo discussed above. The fact that efficacy is enhanced by increased price suggests that offering a patient a cheaper treatment may not only be less popular but also actually demonstrably less clinically effective. (It also suggests that many of our medical cost containment efforts will continue to disappoint us.)

The preceding list of necessary steps for determining the effectiveness and best form of referral for low-acuity patients should illustrate how complicated the decision algorithm is and how little we actually know about it. At each step in the above list, a certain percentage of even the most compliant of patients will become ineligible for prompt urgent care in a clinic. The resulting proportion of low-acuity patients who are appropriate for referral to urgent care will probably be reduced to a fraction of the total, with very modest cost savings to match.

There is still no robust and definitive study that tests the explicit hypothesis that there is an overall net benefit to identifying patients who should be directed to urgent care, much less whether this practice is safe, effective, and truly "efficient." Many of the reports on the potential cost savings find uncertain benefit. To recommend or compel solutions based on our present level of ignorance is to almost guarantee unforeseen consequences, low compliance, disruption to patients, and probably some harm. Our stated goal is to be patient centered, so let's first find out how and why our patients make the choices they do about urgent care.

This editorial has identified a number of logistic obstacles that will need to be resolved before prudent laypersons (or their physicians) feel comfortable changing their practice. Optimizing the process according to a solid understanding and proven solutions would certainly be less controversial, and probably a lot more productive, than just declaring that patients were abusing the system and retroactively refusing to pay their bills.

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