

e-Consults in Allergy and Immunology: “Why Am I Here?”



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“Why am I here?” Whenever I hear this question from a puzzled patient who was referred by their primary care provider to allergy clinic, I know that the encounter will end badly. The query usually occurs in the context of a patient who was referred either for a condition that has nothing to do with allergies (eg, an inappropriate referral such as behavior problems triggered by food allergy) or for one that has such an obvious solution that the parent/patient feels that there was really no reason to seek an allergy consultation (eg, an unnecessary referral such as a brief episode of hives that resolved months ago). There are many other types of inappropriate referral (Table 1); however, they all share a common feature, namely, that the patient did not need to see an allergist and that the visit, once completed, will be seen by the patient and the provider as a waste of time and resources.¹ I could try to “save” the encounter by performing unnecessary tests to appease the parent/patient; however, because I do not feel that this would be ethical, I generally try to explain that testing would not be helpful and that either this is not an allergy problem or the condition has resolved, and no testing or treatment is needed. Either way, the parent/patient is likely to ask, “Then why am I here?”—as if I had something to do with the unnecessary/inappropriate visit.

This may sound like a gratuitous issue; however, it is actually a very serious one. To some allergists, more referrals may sound like additional income regardless of whether they are necessary or appropriate. The results can be more consequential as patients express their dissatisfaction through poor responses on satisfaction surveys, refuse to pay for the perceived unnecessary visit, and ultimately complain to regulatory and insurance agencies. In addition, in some communities, the number of allergy specialists is not sufficient to meet the needs of patients who really do need an allergy consultation, prolonging wait times and leaving patients untreated and at risk.² To avoid this, some practices may choose to screen patients and set criteria for referrals. Patients who demand an unproven test such as IgG for foods, for example, may be denied an

appointment in an evidence-based practice. The problem of inappropriate referrals is not limited to the field of allergy. It has been identified as a problem for cardiologists,³ endocrinologists,⁴ gastroenterologists,⁵ and more recently for allergists.⁶

In the current issue of the *Journal of Allergy and Clinical Immunology: In Practice*, Phadke et al⁷ describe a program at an academic medical center that uses e-consults to triage patients who are being considered for an allergy/immunology consultation. The program relies on asynchronous communication (ie, the provider and the patient are not online at the same time) in which a brief note describing the patient’s condition is forwarded to an “in basket” for review by an allergy specialist. After the information is reviewed, diagnostic and management recommendations are recorded in a brief note in the electronic health record. The referring provider then decides which steps to take on the basis of specialist recommendations. To address the obvious concerns with this process, the article states that “all e-consults include a disclaimer statement that recommendations are based only on the information available in the EHR and that the referring provider is responsible for ongoing management,” which apparently satisfied the institution risk managers. The article goes on to say that 47 specialty areas provide e-consults, with a volume of 10,000 per year. To encourage this, an incentive program has been established to reward specialists for their participation.

Over a 2-year period, 321 allergy e-consults were ordered and 306 were completed. The most common indications for allergy e-consults included adverse drug reactions (65.7%), urticaria/angioedema (16.5%), and immunodeficiency (14.7%). These were requested in decreasing frequency by providers in OB/GYN, internal medicine, family practice, and other specialists. Of these, 59.8% of the e-consults recommended an in-person visit, 26.8% provided advice and education, and 13.4% recommended testing before a recommendation could be made. The median time for responding to an e-consult was 21.8 hours, though the median time for an allergist to complete one was 11 minutes depending on the complexity of the problem. This compared favorably to the median wait time for an in-person appointment of 22.5 days.

In academic medical centers and many private practices, there often is a shortage of specialists, which leads to long wait times for appointments and frustrated referring providers, patients, and specialists, particularly if the visit turns out to have been inappropriate and therefore unnecessary. The use of e-consults offers an opportunity to enhance the benefit of, and to avoid inappropriate referrals by providing input from the specialist about the referral before it takes place.⁸ It is likely that the time required to request the e-consult, write the brief clinical summary, and for the specialist to see the patient would be less than

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TABLE I. Categories of inappropriate referral to a specialist

Type of inappropriate referral	Example: Patient referred to specialist because	Reality	Benefit of e-consult
Adversarial	Divorced parents bring a child so that they can use the allergist to attack each other	Provider never wins by siding with one parent over the other	A warning regarding the situation can help the allergist to be prepared and objective
Bureaucratic	Patient is referred because a guideline or recommendation requires it even though the provider and the patient feel that the referral is unnecessary	Providers and patients should use judgment when choosing a referral. Blind adherence to guidelines is inappropriate	Specialist knows the requirements for prior authorization for biologics and medications and can advise the PCP. If the request is for a brand of medication, the specialist can provide the PCP with alternatives
Inappropriate	Patient has autism/behavior problems. Wants to know what food is causing it	Foods do not cause autism/behavior problems. Parents get angry when told that	Provides an opportunity to educate the PCP about tests and indications for referral
	A food panel is performed, showing numerous low-grade elevated specific IgE to foods that are routinely eaten without a reaction	Specific IgE level should not be measured for foods that are tolerated without a reaction	The specialist can help the patient by suggesting a diagnostic internist or pediatrician
	Referral just in case a poorly defined problem is due to allergies for no specific reason	There should be a specific reason for a referral to an allergist	
Incomplete	Severe asthma without measurement of eosinophil count or total IgE level	Patients being considered for a biologic will need these tests. If done in advance, the visit may be more productive	Saves the patient an office visit by getting appropriate labs, diagnostic imaging, or pulmonary function testing before the initial visit
Premature	1 wk of hives that have not had adequate antihistamine therapy	Most episodes of hives respond to antihistamines, resolve on their own, and do not require an allergy evaluation	Opportunity to educate the PCP about the transient nature of hives and discourage unnecessary testing
Uninformed	Historian does not know anything about the patient's history. Expects you to look at the patient and figure out what is wrong	History is critical to diagnosis. Lack of a history prevents making an accurate diagnosis	Help the PCP to make better referrals in the future by providing a brief history and reminding caregivers to be prepared for the visit
Unnecessary	Patient had hives 6 mo ago. Is here today to find out what caused the hives	There is no way to determine why the patient had hives 6 mo ago. Testing is of no value	Letting the provider know that referral is not necessary for these situations can decrease the specialist's waiting list and decrease medical expenses
	Influenza vaccination in egg-allergic patient	Egg allergy is not a contraindication for a flu shot	
	Local anesthetic allergy	Local anesthetic allergy probably does not exist	
	Penicillin allergy history in a patient who tolerates amoxicillin	If the patient tolerates amoxicillin without a reaction, they do not need testing for penicillin allergy	
	Shrimp allergy and RCM	Crustacean allergy is not related to RCM	
	Local reaction to stinging insects	Local reactions to an insect sting are normal	

PCP, Primary care provider; RCM, radiocontrast media.

the time required for a visit to a specialty clinic when there is no reason for the patient to be there.

The challenge is in setting up a system to manage e-consults.⁹ Academic institutions, accountable care organizations, and large clinics are capable of doing this. Most allergists, who tend to practice in small groups, may have more difficulty setting up an e-consult system. Despite this barrier, communication is available by fax and interoperable electronic medical records. As the benefits are realized, third parties will see the value of paying for e-consults. Current Procedural Terminology codes 99451 (for referring provider) and 99452 (for specialist) have a Centers for Medicare & Medicaid Services work relative value unit of 0.7 (\$26.50 Medicare). Insurers will see the benefit of not requiring a co-pay for a service by a provider that the patient has not seen.

In short, e-consults are coming. BE PREPARED.

REFERENCES

1. Gleason N, Ackerman S, Shipman SA. eConsult—transforming primary care or exacerbating clinician burnout? *JAMA Intern Med* 2018;178:790-1.
2. Center for Health Workforce Studies. American Academy of Allergy, Asthma, and Immunology Report on the Allergy and Immunology Physician Workforce, 1999-2009/10. Available from: <https://www.aaaai.org/Aaaaai/media/MediaLibrary/PDF%20Documents/Practice%20and%20Parameters/2012-AI-Physician-Workforce-Report.pdf>. Accessed June 16, 2019.
3. Wasfy JH, Rao SK, Kalwani N, Chittle MD, Richardson CA, Gallen KM, et al. Longer-term impact of cardiology e-consults. *Am Heart J* 2016;173:86-93.
4. Wasfy JH, Rao SK, Essien UR, Richardson CA, Jeune T, Goldstein SA, et al. Initial experience with endocrinology e-consults. *Endocrine* 2017;55:640-2.
5. Venkatesh RD, Campbell EJ, Thiim M, Rao SK, Ferris TG, Wasfy JH, et al. E-consults in gastroenterology: an opportunity for innovative care. *J Telemed Telecare* 2018. 1357633X18781189.
6. Gupta RS, Warren CM, Smith BM, Jiang J, Blumenstock JA, Davis MM, et al. Prevalence and severity of food allergies among US adults. *JAMA Netw Open* 2019;2:e185630.
7. Phadke N, Wolfson A, Mancini C, Fu X, Goldstein S, Ngo J, et al. Electronic consultations in allergy/immunology. *J Allergy Clin Immunol Pract* 2019.
8. Davis A, Gilchrist V, Grumbach K, James P, Kallenberg R, Shipman SA. Advancing the primary/specialty care interface through Econsults and enhanced referrals. *Ann Fam Med* 2015;13:387-8.
9. The patient-centered medical home neighbor: the interface of the patient-centered medical home with specialty/subspecialty practices. Philadelphia, PA: American College of Physicians; 2010. Policy Paper, Available from: https://www.acponline.org/system/files/documents/advocacy/current_policy_papers/assets/pcmh_neighbors.pdf. Accessed September 10, 2019.