

Letter**Compliance with the triage protocols****Jean-Pierre Tourtier^{1,*}, Laurette Mangouka¹, Stphane de Rudncki¹, Delphine Lemoullac²**¹ Intensive Care Unit, Military Hospital Val de Grce, Paris, France;² Psychiatric Departement, Hospital Clermont de l'Oise, Clermont Cedex, France.**Keywords:** Triage, pediatric, compliance

We would like to congratulate Maeda *et al.* for their study, very well designed, concerning the development of the pediatric triage program in Japan (1). Pediatric telephone triage protocols are a complex and challenging issue, and both under triage and over triage need to be evaluated. With the tendency for increased emergency department (ED) use and overcrowding, triage has become a critical step in ED functioning. Cost-containment efforts have focused on prescreening of patients by telephone to determine who may be redirected to a routine visit or given home advice instead of seeking in the ED. The use of a computerized system could theoretically improve triage by improving its completeness and enhance reproducibility. But telephone triage relies on accurate triage tools for identifying major cases and compliance with the triage protocols. We would like to go further into the debate, and highlight that compliance of both parents and physicians with triage protocol is the corner-stone of triage efficiency. The study of Maeda *et al.* used a hypothetical group of children to investigate the effectiveness of the decision analysis model assessed. The rate at which parents follow the recommendations given by physicians during telephone triage was estimated based on another study (2). Parents' compliance toward recommendation about medical attention was hypothesized to 93.5%. This could appear optimistic. For example, Baker *et al.* studied parental compliance to nurses' telephone triage advice. These authors found that parents had a low compliance when advised to bring their children to the ED – only 42% of non-private patients and 46% of private patients complied with the advice (3). Moreover, the telephone

triage pediatrician's compliance with triage protocol itself was not considered by Maeda *et al.* We would only point out that in real life experience, the rate of compliance of triage personnel with guidelines can be low (4). Piccotti *et al.* assessed the percentage of consistency with the triage process drawn up at the level of pediatric ED, and concluded that they were a need for further efforts to improve compliance with the protocol and pursue a higher degree of uniformity in evaluation by triage personnel (5). Moreover, Wachter *et al.* (evaluating the implementation of a set of standardized pediatric telephone triage protocols) have found that 58% of nurses felt confined by the protocols, and 42% admitted intentional deviation from them, when they believed that optimal patient care mandated that they do so (6). Correlation among dispositions determined by triage providers was poor, despite instructions to follow protocols as closely as possible. Although it is a basic assumption that protocols operate by standardization, these results indicate that nurses did not reliably choose the same protocol in a given case and did not reach the same triage endpoint even when they followed the same protocol. As suggested by Poole *et al.*, nurses may decide "under some circumstances to follow their intuition rather than the protocol's recommendation" (7). And it was found that physicians too can easily break from protocols to achieve disposition of patients, especially the more experienced one (8). Although protocols may be useful to help triage, their application must be studied rigorously before they can be safely disseminated for general use, as far as many bias linked with poor compliance can make telephone triage protocols less seducing in practice.

References

1. Maeda K, Okamoto S, Mishina H, Nabayama T. A decision analysis of effectiveness of the pediatric Telephone triage program in Japan. Biosci Trends. 2009; 3:184-190.

*Address correspondence to:

Dr. Jean-Pierre Tourtier, HIA Val-de-Grce, secrariat de ranimation, 74 boulevard port royal, 75005 Paris, France.
e-mail: jeanpierre.tourtier@free.fr

2. Crane JD, Benjamin JT. Pediatric residents' telephone triage experience: do parents really follow telephone advice? *Arch Pediatr Adolesc Med.* 2000; 154:71-74.
3. Baker RC, Schubert CJ, Kirwan KA, Lenkauskas SM, Spaeth JT. After-hours telephone triage and advice in private and nonprivate pediatric populations. *Arch Pediatr Adolesc Med.* 1999; 153:292-296.
4. Balka E, Whitehouse S. Whose work practice? Situating an electronic triage system within a complex system. *Stud Health Technol Inform.* 2007; 130:59-74.
5. Piccotti E, Magnani M, Tubino B, Sartini M, Di Pietro P. Assessment of the triage system in a pediatric emergency department. A pilot study of critical codes. *J Prev Med Hyg.* 2008; 49:120-123.
6. Wachter DA, Brillman JC, Lewis J, Sapien RE. Pediatric telephone triage protocols: standardized decisionmaking or a false sense of security? *Ann Emerg Med.* 1999; 33:388-394.
7. Poole SR, Schmitt BD, Carruth T, Peterson-Smith A, Slusarski M. After-hours telephone coverage: The application of an area-wide telephone triage and advice system for pediatric practices. *Pediatrics.* 1993; 92:670-679.
8. Pearson SD, Goldman L, Garcia TB, Cook EF, Lee TH. Physician response to a prediction rule for the triage of emergency department patients with chest pain. *J Gen Intern Med.* 1994; 9:241-247.

(Received February 10, 2010)