1027-60-11 **Rod Freed*** (raf12@cox.net), 25832 Empresa, Mission Viejo, CA 92691. *Probability of hitting treatment targets.*

The probability of hitting each of a number of different target levels of a measure of patient health, given the patient's treatment regimen and physiological characteristics, would be valuable to medical professionals. For example, given the patient's treatment regimen and physiological profile, what is the probability that the patient's T-cell count will be 20? Will be 25? Will be 30, . . . ? The medical professional could adjust the treatment regimen so as to optimize the probabilities of hitting the various targets. These probabilities are given by the conditional probability distribution, CPD, (given treatment regimen and physiological profile). This CPD cannot be known. However, we define a conditional empirical distribuion and prove that it will lie within e(1) of the unknown true conditional distribution, except on a set of measure less that e(2), where e(1) and e(2) can be made arbitrarily small. Our approach does not require any assumptions about the forms of the functions which relates the "causes" to the "effects". Nor does it impose any conditions (e.g., normality) on the probability distributions involved. (Received December 14, 2006)