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## **If Not Only Numbers Count: Allocation of Equal Chances**

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**Abstract:**

It is assumed that medical guidelines specify the appropriate amount of a divisible good which each individual should receive. Individual requirements and probabilities that the treatment is successful if an appropriate amount is received differ. The same applies to the success probabilities if individuals are inadequately treated. If supply is insufficient to serve all with appropriate amounts an allocation decision is necessary. We define probabilistic allocation rules that allocate chances of successful treatment to all individuals. We analyse a specific random allocation rule that assigns maximal equal gains of chances. We characterize the equal gain rule axiomatically.