The notion of rationing healthcare is taboo: people quite naturally feel no one should limit the resources spent extending a human life, particularly theirs or their loved ones’. Transplantation can transform the lives of organ recipients, but must be rationed by access to the far-too-small supply of donated organs, so it is a microcosm of the ethical dilemmas and accumulated inefficiencies and difficult tradeoffs in allocating healthcare. Mathematics and operations research can increase the supply of live donor kidneys, maximize the number of life years gained from transplantation, or redistrict the geographic boundaries to make organ allocation more fair. I will share my experiences from the transplant community. (Received June 12, 2011)