

Professor Robert A Aronowitz, M.D.  
Professor and Chair  
History and Sociology of Science  
University of Pennsylvania, USA

## **Clinical Decision Making in an Era of Risk-centered Medicine**

### Abstract:

In the process of making disease, especially chronic disease, risk-centered, we have spawned interventions which do all kinds of work, such as providing reassurance, reducing fear, and signaling responsibility for health. Risk reducing interventions – calls for behavioral change, screening, preventative drugs – are increasingly prevalent. Their efficacy is necessarily understood in a different way than practices which directly and immediately impact symptoms from, or signs of, disease. Their efficacy involves some leap of faith, often involving trust in results of epidemiological or clinical research. Practitioners, patients, and consumers at the same time need some witnessed evidence of efficacy – reports of lowered cholesterol, improvements on bone densitometry, or images of healthy bowels. At a more psychological level, efficacy is often constituted by reduction in fear, banishing uncertainty, and reasserting some control over feelings of randomness. Risk reducing interventions and risks themselves are often co-constructed and together constitute a coherent if largely invisible system of belief and practice. This system, often loosely tethered to any medical evidence, undergirds efficacy calculations and clinical and consumer decision making.

I will offer two sets of reflections on this system. The first is an overview of the social and psychological work done by modern risk interventions. The second covers the ways – besides the strength of medical evidence – that doctors, patients, and consumers in recent decades have been persuaded that risk interventions are efficacious. Many risk interventions diffuse before their scientific efficacy has been established or even tested by rigorous clinical experiments. Understanding how and why this happens is crucial to formulating workable responses to many current dilemmas in disease prevention practices and policies and to prepare healthcare learners for a changing medical world.