

Medicine of the Future

Yann Meunier

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Risk Assessment, Elimination or Mitigation,
and Action Plans for 28 Diseases
and Medical Conditions

 Springer

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Foreword

You have addressed a wide variety of topics related to chronic disease. This is a list that is well beyond the menu of chronic disease management programs that I have seen. It seems to me that most of the patient visits to physician offices or clinics are for the conditions you have identified. Obviously, the expenditures for these conditions represent a huge financial cost burden to any nation, and the cost is likely to increase as populations age. Fortunately, most of the chronic conditions are caused by or are aggravated by an unhealthy lifestyle. In one sense, this is good news because changing one's lifestyle is both sustainable over time and less expensive to the medical care system. There may be additional chronic diseases for which you will need to develop new programs, but I see that as opportunity rather than deficiency in your planning. As you continue your work, more programs can be developed with the same attention to scientific best practice recommendations, and you will be able to reach a larger population.

You indicate in your request for my review that these materials contain state-of-the-art information for each disease/condition on genetic and biologic markers, personal and family medical history, demographics, and comorbidities. My review supports your contention that the information should not be considered as supplementary but instead significant to the medical evaluation, diagnosis, and recommendations offered to the patient. It seems to me that this is often a missing component to the delivery of medical care both in the US and in other countries. With this type of information, risk factors can be identified early and mitigated prior to unnecessary progression of the disease caused by lack of preventive tactics. This is the future of medicine, where the medical provider becomes a patient advocate for healthy lifestyle as a way of promoting health and preventing disease.

I know that you are an expert in the development of personal action plans, plans that are based in behavioral science and tactics that have demonstrated efficacy as well as sustained impact. As I read the action plans, I was impressed with the thoughtful content and, of equal importance, the processes that are recommended within the personal wellness plans. There is a subtle but extremely important shift in the relationship between physician and patient: one that sees the physician encouraging the patient to become an active participant in the health

promotion/disease prevention strategy and one in which the patient now has adequate tools for assuming this responsibility. The medical outcome is likely to be favorably changed when the patient does this. The physician is working *with* the patient as an advocate, and it goes beyond the more typical medical model, which sees the physician working *for* the patient. This shift in paradigm is a significant benefit to patients, and when adopted as a population health strategy, the physician's role will become more important than is currently the case.

I believe that forward-thinking organizations and medical groups will find your document to be quite attractive. With medicine having such a long history where the doctor "treats" the patient with medicine or surgery while overlooking the essential root causes, I see your programs as being ambitious and I hope that you are successful. We need models such as this to demonstrate that lifestyle and the advocacy relationship between physician and patient are key to major breakthroughs in population health. I wish you much success. Wes

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About the Author



Yann Meunier, MD, was the director of International Corporate Affairs and Business Development for Stanford Hospital and Clinics and the director of the Stanford Health Promotion Network.

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He was a medical doctorate thesis director and advisor in various Paris universities on public health topics such as “Epidemiological Study and Screening for Cervix Cancer by PAP Smear in Lifou, New Caledonia.”

As the chief medical officer for a US corporation in Papua New Guinea, he created and implemented a public health program for about 10,000 villagers in the Kutubu area of the Southern Highlands Province.

In Singapore, for a charity organization, he led a medical team pioneering public health programs for the Yi people in the Yunnan Province of China. As the first and only French private practitioner in the city-state, he addressed public health topics for the expatriate community such as: “Influence of Climate on Health,” “Young People and HIV/AIDS,” “Healthcare in Southeast Asia,” “Malaria in Asia,” and “The Use of Drugs and Alcohol by Teenagers.”

As the first and only private practitioner in Lifou, New Caledonia, he wrote a report on public health priorities for the island, which incited the French government to tackle potable water and other sanitation issues.

He has field experience of HIV/AIDS, malaria, dengue fever, SARS, Japanese encephalitis, and meningitis.

He is widely published on Preventive Medicine matters such as “Struggle Against Cholera,” “Precautions to Take Before Traveling to a Tropical Country,” and “Hepatitis B: Who Must Be Immunized?”

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Last but not least, this book is dedicated to *Sammy* the cat (aka Singapore Sling) who spent as much time cuddling by the computer as the author did researching and typing on it.

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Introduction

We live in a time when healthcare costs are soaring worldwide. Healthcare systems of the future should be patient and not healthcare provider centered. The latter's primary role will be to empower patients to become fully in charge of their well-being so that they stay healthy as long as possible as opposed to seeing them mainly when they are sick nowadays.

This will also help delay or prevent the appearance of chronic diseases, which represent the bulk of healthcare and healthcare-related expenses in the current societal and economic environments. Indeed, for the most part, it will take heavy technology, which is the main driver of healthcare costs, out of the spending equation. Placing prevention at the core of the healthcare system will contain and hopefully reduce spending.

In order to achieve this mutation, healthcare providers will have first and foremost to inform healthy people about their risk profile qualitatively (for which diseases/medical conditions are they at risk?) and quantitatively (how high is the risk for each disease/medical condition?).

Medicine is only at the infancy stage of adopting really cost-effective prevention as the mainstay of healthcare. As a matter of fact, the bulk of patients in medical practices of the future will be healthy, and their main issue will be risk management. We are obviously a long way from reaching this situation. The healthcare field must morph from an essentially reactive discipline to a mainly proactive one. We have already used this novel approach with great success in smoking awareness/cessation campaigns and health promotion plans in specific environments. The positive outcome was mainly due to the fact that we knew health consequences and the cost of inaction. Going forward, generalizing this stance to all diseases and medical conditions is the key to productive healthcare management individually and collectively. The first step of prevention is risk assessment. It can be made at various levels: genetic, biochemical, serological, past medical history, family history, comorbidities, age, gender, ethnicity, nutrition, and lifestyle. They are all addressed in this book regarding 28 diseases and medical conditions to determine a risk profile for each individual. Recommendations are made to avoid, eliminate, or mitigate risks,

and preventive measures are suggested concerning chemical compounds intake, lifestyle, and nutrition.

The next step is for physicians to establish, with their patients and taking into account their physical and human milieus (including enabling and hindrance factors), health action plans that will often rely on behavior change. The aggregation of science-based data should also enable practitioners to elaborate disease management programs with all individuals.

Furthermore, combined with using motivation assessment tools, evaluating readiness for change and developing and implementing these health promotion programs will facilitate the delivery of primary, secondary, and tertiary prevention initiatives at community levels. This book addresses essentially the individual level. Ultimately, patients are responsible for their own health and should be informed and invigorated to make the right choices.

In conceptualizing this book, my main drivers were to: (1) write a pamphlet taking the approach to each disease and medical condition as an argument toward a new attitude in dealing with them, (2) impart new knowledge and/or old knowledge in a new way, (3) provide a process template for dealing with diseases before they manifest themselves and possibly delay or prevent their emergence, and (4) hope that it will represent a beacon on the path to medicine of the future.

One fiction scenario that could become reality is the extension of individual lifespan by organ substitution. Based on thorough risk assessment, computer modeling and organ reconstitution using stem cells, organ failures could be predicted well before they happen and new organs readied as needed.

Right now a critical mass of novel mindset is needed if we want to improve healthcare delivery everywhere by adopting or imitating the new matrix I suggest. In doing so, we will avoid all the disastrous consequences of a collapse of the current healthcare model, which is inevitable despite measures taken and proposed.

Yann Meunier, MD

P.S.: The information included in this book is meant to be completed, updated, and expanded, particularly as genetic testing and biochemical and serological markers become more numerous, reliable, affordable, thorough, and widespread. Additionally, a large space is available for new risks to be discovered and for current ones to be better quantified. Thus, present preventive strategies will be improved and new ones created.