

Jacob Stegenga. *Care and Cure: An Introduction to Philosophy of Medicine.* University of Chicago Press 2018. 288 pp. \$75.00 USD (Hardcover ISBN 9780226590813); \$25.00 USD (Paperback ISBN 9780226595030).

Jacob Stegenga's *Care and Cure: An Introduction to Philosophy of Medicine* is a valuable and well-ordered introductory text that is as clear as it is comprehensive. In fourteen chapters, organized conceptually into four parts, Stegenga surveys the philosophy of medicine. These are: 'Concepts' (Part I), 'Models and Kinds' (Part II), 'Evidence and Inference' (Part III), and 'Values and Policy' (Part IV). In each chapter, Stegenga presents core definitions, positive positions, and objections to many issues taken up by philosophers working within the parameters of this young field. Stegenga takes care in each chapter to frame the discussion therein, opening with a summary, sketching the material to come, and closing each chapter with discussion questions and further readings. The book is appropriate to use as the central text for an undergraduate course. Including further readings, instructors will find this course material suitable for an advanced graduate seminar.

Stegenga intends that students with little background in philosophy will find the text accessible. He achieves his aim, and I find the prospect to employ this book in medical education settings for future clinicians and biomedical researchers to foster reflective practices on their chosen field to be especially compelling. Stegenga resists arguing explicitly for particular philosophical positions, and likewise, he does not claim a unifying thesis for his text (4). In this review, I summarize the core material from each chapter. I conclude with a few words about the limits of the text, which are few.

In his introduction, Stegenga circumscribes under the heading 'medicine' both 'clinical medicine,' or the attempt to care for patients, and 'clinical research,' or the study of the efficacy of interventions, noting that medicine relies on more fundamental scientific research prior to testing in humans. Chapters one and two address health and disease. Stegenga introduces a conception of health called *neutralism*, which conceives of health as the mere absence of disease, and this is contrasted with the notion of *positive health* that calls also for human flourishing. A worry, says Stegenga, for the positive conception of health, is that a commitment to flourishing overextends the scope of medicine. *Objectivism* (having to do with facts of the matter) is contrasted with *subjectivism* (personal assessment), and these competing perspectives set up a discussion of *naturalism* (having to do with natural facts) and *normativism* (requiring the application of evaluative criteria) to define health and disease.

Stegenga explains that naturalism is not to be taken as value-free. Without interpretation, the natural facts do not demarcate health from disease. The choice of a reference range is required against which to measure the natural facts, and so, naturalism is also called the *biostatistical theory of disease*.

Hybridism is a middle way account of disease that blends these two main positions: naturalism and normativism. If not the middle way, there is *eliminativism*, which refuses any general theory of disease, but without a general theory of disease, Stegenga warns, medical education and inter-professional communication suffer. Ultimately, his preference is for a theory of disease that is amenable to medicine's aims: to care and to cure. The former captures the normativist's concern for mitigating harm; the latter is to resolve the physiological abnormality. Stegenga introduces *phenomenology* in his discussion of health and disease as a version of subjectivism. The first personal account of illness promoted by phenomenology may provide clues to illness and disease biomedicine overlooked. Beyond health and disease, there is death, a central part of medicine, claims Stegenga, in chapter three. Besides, 'an endless life is meaningless life' (43).

In chapter four, Stegenga discusses causation and kinds, and he begins by defining nosology, or disease classification. He offers the following types of disease classification, including etiological (causes), pathophysiological (processes), and symptom-based. Nosology, what it takes to ‘have’ a given disease, is not to be confused with diagnosis, or inferring what disease a person has. Diagnosing differs with respect to the favored theory of disease: on an etiological account of disease, a clinician distinguishes between a person presenting with symptoms of a particular disease and a person who in fact has that disease, while symptom-based accounts of disease reveal less distinction between the presenting symptoms and the person who has the disease.

Modern healthcare conceives of disease by an etiological, mechanistic pathophysiological model. A disease ‘itself’ is not defined by diagnostic criteria; rather, the disease is the aberrant biology, or ‘pathophysiology.’ One important exception is psychiatric nosology, or the classification of psychiatric disease. Many difficult questions involving the brain remain to be resolved and so diagnosing psychiatric disorders by way of pathophysiology is not (yet) available to the clinician. The present psychiatric nosology is symptom-based. To have a psychiatric disease just is to present with the symptoms which define the disease.

In chapter five, Stegenga takes up a discussion of holism and reductionism. He defines them in this way: *reductionism* is to frame biomedicine by microphysiological parts and processes; whereas holism is concerned with the whole person rather than the disease entity. Medical interventions for reductionists seek to target aberrant microphysiology. Holists seek social and economic intervention, threatening to extend the scope of medicine beyond what is appropriate.

Chapter six approaches the topic of ‘controversial’ diseases. The worry is that some diseases are not ‘real’ in the sense that they may be *medicalized* aspects of ‘normal’ existence. In psychiatric nosology, this is especially problematic, where diagnostic criteria and disease entities have shifted with cultural tides, so to speak. Those committed to the positive account of psychiatry as a progressive science appeal to the inference to the best explanation (IBE)-style ‘no-miracles argument’ (NMA) to defend psychiatric interventional progress over time. The NMA trades in the intuition that it would be miraculous were our practices as successful as they are, if our theories were not at least approximately true. I am pleased to see Stegenga introduce this influential argument, if only in an abbreviated manner, as its central role in the general philosophy of science as a defense of scientific realism is important for early students.

Chapters organized under ‘Evidence and Inference’ (Part III) begin with chapter seven, ‘Evidence in Medicine.’ Evidence based medicine (EBM) advances a hierarchy of evidence to inform research and medical decision making, with randomized control trials (RCTs) as the gold standard, followed by cohort studies, and laboratory and anecdotal accounts ranking near the bottom. Evidence and the inferences from which these data serve as a basis often turn on the notion of mechanism, or ‘a collection of entities and activities that generate particular output from particular input’ (120).

In chapter eight, Stegenga discusses ‘objectivity’ as reliability or truth-conduciveness. Stegenga also discusses values, like those employed in scientific reasoning (coherence and scope, to name two). Drawing on the work of Helen Longino, Stegenga discusses the structure of scientific communities, norms of active criticism, and efforts toward eliminating bias, as tactics to mitigate risks to objectivity.

In the chapter on inference (chapter 9), Stegenga engages in a thoughtful discussion of extrapolation from a base population to its target and the role for these analyses in EBM. He then discusses measuring effectiveness of interventions, and he proceeds with a summary of rival accounts of statistical inference, namely, frequentism and Bayesianism, including mention of the base-rate fallacy, an important (and often overlooked) variable in Bayesian inference.

A guiding question in chapter ten is whether medicine is effective. Stegenga promotes his favored position: medical nihilism, a topic Stegenga treats elsewhere, in a book-length account. Medical nihilism refers to a cluster of skeptical positions that challenge medicine's efficacy. Stegenga defines the placebo and nocebo effects, good and harmful physiological outcomes, respectively, after administration of a purportedly physiologically ineffective, or inert, agent, in terms of expectation effects.

Stegenga returns to diagnosis in chapter eleven, and he suggests two contributors to over-diagnoses and over-treatment: (i) the fee-for-service (FFS) reimbursement model; and (ii) the 'pessimistic view of screening,' whereby proactive diagnostic screening results in over-diagnosis of asymptomatic individuals.

Chapter twelve surveys possible attitudes toward psychiatry. Philosophers have long puzzled over the 'hard problem' of consciousness, namely, that an explanation for our rich mental lives seemingly escapes simple reduction to the physical states of the brain. Stegenga cautions these hard problems may further burden philosophical issues in the realm of psychiatry.

In the final chapters, Stegenga turns to policy and global considerations. He contrasts libertarianism and socialism in medicine and distinguishes between these attitudes toward research, on the one hand, and attitudes toward delivery, on the other. Stegenga takes up public health issues in the final chapter (chapter 14).

I note two limitations of the text: first, I challenge that both clinical care and biomedical research fall under the heading 'medicine.' The fields are no doubt closely related, but the aims of the clinician in care settings and the aims of researchers at the bench may call for more fine-grained distinction and philosophical examination. Second, Stegenga's text is intended to be used linearly; earlier concepts and definitions are employed later, and so unlike an edited volume, chapters do not stand alone. Whether an instructor seeks a central course text or prefers the flexibility to design one's own syllabus, depends on pedagogical preference and setting, but this book undoubtedly favors the former. These considerations notwithstanding, Stegenga's text is clear, organized, accessible, and thorough. It is an important contribution to this growing field.

Adam Hayden, Indiana University–Purdue University Indianapolis