6. Cooperation between economics and social and human sciences

Hello, my name is Jean-Claude Dupont, I studied philosophy, and since 2008 have been working with health economists, namely at the French National Health Authority. I worked at the Curie Institute. I'm now on Paris Hospitals' Clinical Research and Innovation Delegation as deputy director of the Hospinnomics health economics research chair. In this video, we will discuss cooperation between economics and other social and human sciences (SHS) when they are used in the health field, since economics also falls into the SHS category. I will not attempt to draw any strict distinction. What sums up SHS, including economics, is that they deal with phenomena and interventions which could not exist outside of human society and cooperation can occur among them to improve health, for instance. We must however highlight two ways that economics differs from other SHS. First, we can specify that economics is based on an assumption, the assumption that human achievement requires resources: time, skills, and means, which are limited by nature. Economics, in turn, seeks to identify the choices and trade-offs we have to make between actions that are legitimate but cannot all be carried out simultaneously. Second, we can specify that economics establishes, through these methods, an experimental and analytical framework that seeks to explain in a causal way the effectiveness of certain actions according to certain criteria. Methods used in economics offer the benefits of quantitative approaches, based on findings. Outcomes can be replicated. When we have doubts as to our ability to replicate them, we can choose to measure or even simulate this uncertainty. But the same problems arise as with data from clinical trials. You need to be able to capture individual variability, which represents the depth of real life by using other methods outside those experimental and analytical frameworks. This is when other methods of SHS are highly useful: their qualitative approaches help us to understand health interventions and their implications in a very precise and complex way, and also help us highlight the various perceptions, interpretations, – and all their variations – among all actors across the health care system. It is therefore important to find a balance between quality of explanation and depth of comprehension brought by other qualitative elements which complement findings obtained using economic methods. We can see this cooperation in at least two areas of health. The first area in which this cooperation between economics and SHS can be found in health technology assessments (HTAs). This type of assessment can be done for both clinical and technical aspects of technology. The intervention and its effects on the patient's health are recorded. The assessment can look at the economic aspects of the intervention then it can be widened and become global, making it a full health technology assessment, which includes the judicial, ethical, social and organizational aspects of implementing the technology. This assessment exists in Europe and in France. In Europe, it is part of a consortium, European Network for HTA, and in France through the French National Health Authority. In Europe, this assessment led to the formalization of SHS methods, including economic methods, which are used to assess health technologies. In France, methodological formalization was carried out using methodological guides from the National Health Authority (HAS), available on their website. One guide is for economic assessment, another is for ethical assessment, and another for social assessment, all on health technology. They are accompanied by a guide on budgetary impact assessment. There is a positive impact of formalizing SHS methods in health.

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Efforts toward methodological formalization include recognizing clearly the contribution economics and other SHS bring to assessments in the health field. Today this raises two open questions. First, how do these various aspects work together? In assessments on certain health technologies, these aspects are presented one after another, and the decision to implement of them is deliberated. This can be done collectively if it is for a commission, like the Public Health and Economic Assessment Commission in France or individually, for instance, when the HAS sends recommendations to a decision-maker, the decision-maker is the one that considers all the approaches. A second question – which does not concern economics but other SHS – stems from the fact that these methods applicable to sociological, ethical, and judicial findings, and so on, rely on synthesis methods and systematic reviewing. Therefore, we encounter the same limits we mentioned in the part about formalization of methods on meta-analysis or meta-research in the medical field: none of the findings we generate are new but they are useful. Therefore, this assessment approach or this way of integrating, within the assessment, other SHS than economics, cannot be used to replace research programs or generate new health care findings. Creating health research protocols, which requires cooperation between economic methods and other SHS methods provides the opportunity to generate new findings by using SHS methods, and, from an economics standpoint, to generate findings using methods that are different or new in comparison to the standard methods presented in the aforementioned guides. This question of cooperation between economic methods and methods from other fields within a protocol raises an interesting and important question: Could there be hierarchies, or even instrumentalization among those fields? This is a major topic in sociology of science and epistemology. The primary objective of the health field is, no doubt, to create balances, rigorous protocols, and to leave the theorizing for a later date. With these questions in mind, I will now focus on using qualitative findings within protocols based on economic research methods. Economic research protocols are based on hypotheses. For instance: will the intervention being considered be complementary to or substitute an existing intervention? Other hypotheses concern the motivations of actors whether intrinsic or extrinsic, altruistic or rational. There can also be hypotheses on the initial effectiveness of one incentive compared to another. Similarly, with different measurement methods we are able to generate findings that don't necessarily converge. If a qualitative element is included in a protocol for economic research, it will give us precise data on the environment of the intervention allowing us to justify our choices of hypotheses, even criticize them, or at least to identify their limits, and giving us information to interpret and make sense of the findings we observe after applying economic methods. Another interesting case is when the validity of findings obtained using economic methods is contingent upon the application of qualitative methods. This happens, for instance, in the case of the discrete choice method. This method aims to test how different characteristics of an action can influence the probability that an individual will take a particular action. These methods are especially important in generating valuable findings on how people observe, adhere to, and accept actions. But unless you expect to be able to question thousands of patients and professionals within an infinite time frame, this method can only be used for a maximum of 4 or 5 characteristics. If they are chosen at random, the validity of the study will of course be very limited.

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However, if you choose the characteristics the most meaningful to either patients or professionals, followed by a well carried out method and qualitative approach, you could increase the external validity of economic research findings. Therefore, we are working towards an increasingly clear, precise cooperation between quantitative methods in economics and qualitative methods taken from other SHS. Still in the field of economics, this progression can even inspire us to reflect on incorporating those different findings, which differ in nature, within multi-criteria methods. Nearing the end of this video about cooperation between economics and other SHS, we can take away these key messages: first, the health field needs to communicate findings that can be generated using these different methods. It is good that there are methodological guides for this. The priority is no doubt to further develop this cooperation, as it generates findings that can help health care to be applied more appropriately. The many ways economics and SHS cooperate are not neutral, and can be questioned. But this critical reflection, related to epistemology or the sociology of science, concerns another framework than that of health, and must not slow the development of rigorous protocols applying these methods together along with methods of clinical assessment and investigation. Today, it is essential to generate knowledge about the effectiveness of interventions in the health field for reasons you will discover throughout this MOOC. As far as other SHS are concerned, we can see the necessity to develop health research as an opportunity to add to the health agendas of clinical communities specialized in certain diseases, or on a larger scale, the agenda of the national health care system. Ultimately, perhaps the main challenge for SHS in the health field, economics included, is to improve the incorporation of these methods into all research and assessments that are carried out on on health interventions and the many ways health care is organized.