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## Capturing Flexible Heterogeneous Utility Curves: A Bayesian Spline Approach.

**Aim:** When it came into force on 1 January 1993, the Health Structure Act brought about far-reaching changes in the German health system by completely reorganising needs-related planning for office-based medical care. The experience to date suggests that needs-related planning is having an effect. Since the law came into effect, the increase in the number of doctors has clearly levelled off, and in certain fields the trend can even be said to have been reversed. Indeed, needs-related planning will in future have to address a completely new issue, one that only a few years ago was considered inconceivable: a looming lack of doctors. It is precisely in this context that needs-related planning, an arrangement conceived when the number of doctors was rising, can be seen to have strategic flaws. It has now become clear that the data (population, number of doctors) and information on structures (geographical planning units) drawn on in needs-related planning to indicate the degree of provision are unsuitable for ascertaining the need for, and controlling the supply of, office-based medical care. Indeed, the current needs-related planning hardly justifies its name. **Subjects and methods:** There is a need for genuinely strategic planning that, rather than measuring the status quo in isolation, takes due heed of likely future trends in such factors as population and the number of doctors. **Results and conclusion:** The reversal of the trend from over- to undersupply of medical care has brought about an increasing scarcity of points of access. If the Associations of Statutory Health Insurance Physicians are to meet their legal commitment to provide universal medical coverage, it is essential that an analysis of the relationships within the care supply network be carried out. A potential solution to this problem is offered by “regional studies interaction models”, which model the physical accessibility and convenience for patients of supplier locations (here: office-based physicians) and the response of the demand side (here: the patients) to the existing geographical constellations.