

Testing the effectiveness of risk equalization models in health insurance: A new method and its application

Short summary

“Testing the effectiveness of risk equalization models in health insurance” contains a new method to test for and improve upon the effectiveness of risk-adjusted premium subsidies in competitive health insurance markets. A regulatory system of risk-adjusted premium subsidies is the preferred approach to ensure affordable out-of-pocket premiums for those at high risk. In that case, price competition among insurers is not distorted and therefore incentives for efficiency are not reduced. In all countries that apply risk-adjusted premium subsidies, the government (or employer, or another 'sponsor') organizes this system in the form of risk equalization among insurers.

In practice, however, the implementation of such a system may not fully satisfy the policy goals due to a lack of adequate empirical data. The extent to which this is the case can be determined by the approach developed in this study. In addition, alternative model specifications can be tested to determine their potential to improve affordability. As an example, the method is applied to the 2004 Dutch risk equalization model. This study is relevant in the context of a policy to improve efficiency and responsiveness to the consumers' preferences in the health care sector and simultaneously ensure affordable out-of-pocket premiums for high-risk insured people.

When implementing a risk equalization model, a government (or employer, or another 'sponsor') should always make an explicit choice about the risk factors for which insured should be compensated and for which risk factors not. With respect to the Dutch risk equalization model it can be concluded that, although currently it is one of the most sophisticated risk equalization formula in the world, this model does not fully satisfy the policy goal as stated by Dutch government. The effectiveness of the Dutch risk equalization model can be improved by the addition of risk adjusters based on consumption-in-the-past of physiotherapy, medical devices and drugs for mental diseases. In addition, systems of ex-post compensation appear to offer an important contribution to the effectiveness of the Dutch risk equalization model, even after the addition of such promising risk adjusters. It should be noted that a disadvantage of such ex-post arrangements is that they reduce the insurers' incentive for efficiency at the same time. Finally, from this study it follows that health insurers should have the opportunity to risk rate their premiums according to the risk factors for which government has explicitly chosen not to compensate via risk equalization, for example according to the region where an insured lives (which Dutch insurers are already allowed to do under the Dutch Health Insurance Act 2006) and being self-employed or not.