Increasing breast cancer screening uptake: a randomized controlled experiment

Guillaume Hollard*¹, Léontine Goldzahl*², and Florence Jusot*²

¹Centre de Recherche en Économie et Statistique (CREST) – INSEE, École Nationale de la Statistique et de l'Administration Économique – Rue Pierre Larousse Malakoff France, France

²Laboratoire d'Economie de Dauphine (LEDa) – Université Paris IX - Paris Dauphine – "Place du Maréchal de Lattre de Tassigny 75775 PARIS Cedex 16", France

Abstract

Early screening increases the likelihood to detect a cancer at a more local stage, thereby improving survival rate. National screening programs were established in many countries so that eligible women receive a letter containing a voucher for free screening as well as some information. Yet, many policy makers consider that mammography use is still too low and hides socioeconomic and health status disparities.

This study presents a large scale randomized experiment testing several behavioral interventions to increase breast cancer screening uptake rates. Our main assumption is that, because of some variability or biases in their decision process, women may be sensitive to the content and presentation of the invitation letter they received. We conducted a large scale randomized controlled experiment which consists in varying several features of the invitations letters. Our main result is that, despite a large sample of 26,495 women, none of our four treatments had any significant impact on mammography use. Subsample analysis show that even for women invited for the first time or those whose decisions are perhaps more prone to bias (low income women), treatments had no significant effects. Furthermore, mammography use is found to be stable across time, as if women chose to screen (or not) once for all. Our favorite interpretation is that every thing goes on as if women are taking clear and well informed decisions. Policy implications are that existing programs probably reached an upper-bound and can hardly be improved in their current form.

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^{*}Speaker