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Topic of the paper: Equity in health and health care access

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Title: Socio-economic and health determinants of inequalities in diagnostic care utilization in Italy

Abstract:

Previous analyses on socio-economic determinants of utilization of health care in Italy and in Europe, showed the existence of inequalities in the use of specialist care (Atella and Deb, 2008; Fabbri, and Monfardini, 2003; Atella et al., 2003; van Doorslaer, Masseria and Koolman, 2006; Deb and Trivedi, 2002, 1997; Labeaga and Martínez-Granado, 2002). However, there is scarce evidence for Italy on the use of diagnostic care during the period of the global recession. The aim of the paper is to provide new empirical evidence on the socio-economic (SES) and health determinants of diagnostic care utilization in Italy. Following Bago d'Uva (2005) and Bago d'Uva and Jones (2009), we estimate and compare different models for count data for each dependent variable: Poisson, Negative Binomial, Two-Part/Hurdle, Finite Mixture, including Finite Mixture Hurdle models. Our dependent variables are the number of specialist diagnostic tests (routine diagnostic tests as, e.g., blood and urine) and diagnostic specialist care services (RMN, CT Scans etc.). We examine the effect of SES (low income, foreign citizens, employment conditions, civil status, exemptions etc.); demographic conditions; need factors (health status conditions; types of chronic diseases) and geographical factors as drivers of inequalities in utilization. Newly with respect to previous evidence, we look at various measures of health status conditions by including among the determinants of utilisation different types of chronic diseases (diabetes, cancer, hypertension and others). Our analysis suggests that the best models specification are, respectively, the double hurdle with Zero Inflated Negbin (ZINB) for diagnostic care and Finite Mixture (FMM), for specialist care. As expected, consumption of all types of services increases with bad health conditions. Poor socio-economic status and foreign citizenship is significantly associated with lower use levels. Marginal effects are positive and significant for most chronic diseases, with cancer showing the highest effect for diagnostic care among all different types of diseases. Regional disparities emerge, with higher levels of utilization in Central Italy. All SES appear to be significant determinants for being no/low users, while in most models only health conditions are significant determinants for being among the high users of services.

There is evidence that socio-economic and geographical factors affect relatively more non-users /lower users than the high users. This could signal problems in accessing care. Overall, increasing SES inequalities use in diagnostic care may imply delayed diagnosis and treatment for the lower SES population groups, ultimately negatively impacting on the health of the population. Policy implications are discussed.

Keywords: diagnostic care utilization, count data models

References

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