Abstract 3: **Effect of a per capita payment system on utilization and claims expenditure under the NHIS**

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**Introduction**: Ghana introduced capitation payment under National Health Insurance Scheme (NHIS) in 2012 with a key objective of controlling utilization and cost. This study sought to analyse utilization and claims expenditure data before and after introduction of capitation payment policy to understand whether the intended objective was achieved.

**Methods**: The study was cross-sectional, using a non-equivalent pre-test and post-test control group design. We did trend analysis, comparing utilization and claims expenditure data from three administrative regions of Ghana over a 5-year period, 2010-2014. We performed multivariate analysis to determine differences in utilization and claims expenditure between intervention and control regions, and a difference-in-differences analysis to determine the effect of capitation payment on utilization and claims expenditure in the intervention region.

**Results:** Growth in outpatient utilization and claims expenditure increased in the pre capitation period in all three regions but slowed in post capitation period in the intervention region. Linear regression analysis showed that there were significant differences in outpatient utilization (p=0.0029) and claims expenditure (p=0.0003) between the intervention and the control regions before implementation of the capitation payment. However, only claims expenditure showed significant difference (p=0.0361) between the intervention and control regions after the introduction of capitation payment. A difference-in-differences analysis, however, showed that capitation payment had a significant negative effect on utilization only, in the Ashanti region (p<0.007).Factors including availability of district hospitals and clinics were significant predictors of outpatient health care utilization.

**Conclusion:** Outpatient utilization and related claims expenditure increased in both pre and post capitation periods, but the increase in post capitation period was at slower rate, suggesting that implementation of capitation payment yielded some positive results. Health policy makers in Ghana may, therefore, want to consider capitation a key provider payment method for primary outpatient care in order to control cost in health care delivery.