Institutional innovations in Public Governance in Russia: case of evidence-based policy.

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Abstract: In the last decade many transition countries including Russia modernizing their governance use advanced tools that have proven successful in countries with developed institutional environment. Due to the digitalization of public administration, the transition to Big Data, the use of online platforms for participatory and co-production, trends in public administration have begun to emerge, based on idea “fit for all Seasons”. But the practical implementation of this approach in Russia is complicated by a number of circumstances, both objective and subjective. The key point is the lack of available data to implement appropriate budget expenditure management tools and the information needed to make informed decisions. On basis of EBP-principles (Liebman, 2013) we analyzed government programs in the field of environmental management from the point of view of the possibility of using the potential of big data to identify the potential impact of government spending on Impact (in particular, public health). We use Content-Analysis of state Programs, Machine Learning (ML) approach, Modelling in Python and Econometric Analysis as research method. So we consider the 6 environmental factors that influence well-being and human capital. As shown by the model assessment, environmental factors have a significant impact on the population incidence. So, other things being equal, with an increase in emissions of pollutants into the air from stationary sources (WasteAir) per unit (ton per capita), the incidence rate per 1000 people (diseases registered in patients diagnosed for the first time in their life) region increases by 107 units. With an increase in the share of industry in the gross regional product (Indust) by one percent, the incidence increases by 3 units.

In addition, bad habits have a significant and significant impact on the health of the population. An increase in expenditures on alcoholic beverages and tobacco products in the structure of household expenditures (AlcTob) by one percent is reflected in an increase in morbidity by 17 units.

Points for Practitioners: Increasing life expectancy as a well-being indicator is the first goal among the outcomes provided for by the Decree of the President of the Russian Federation "On the national development goals of the Russian Federation for the period up to 2030". Another important development goal is to create a “comfortable and safe environment for life” by “halving the emissions of hazardous pollutants that have the greatest negative impact on the environment and human health”. However, in reality, regional authorities often do not use statistical indicators to make informed decisions when analyzing environmental issues. The article shows the potential of using "evidence-based policy" on the example of the ecology. Particular emphasis is placed on outcomes and Impact of state programs. Based on modeling using machine learning, we analyzed data for Russian regions based on factors affecting public health. As shown by the assessment of the model, environmental factors do have significant impact on the incidence of the population. So, other things being equal, with an increase in emissions of pollutants into the air from stationary sources (WasteAir) per unit (ton per capita), the incidence per 1000 people in the region increases by 107 units. With an increase in the share of industry in the gross regional product by one percent, the

incidence increases by 3 units. First of all, we are talking about old industrial factories, which make a small contribution to the gross regional product, but are negative for the environment.