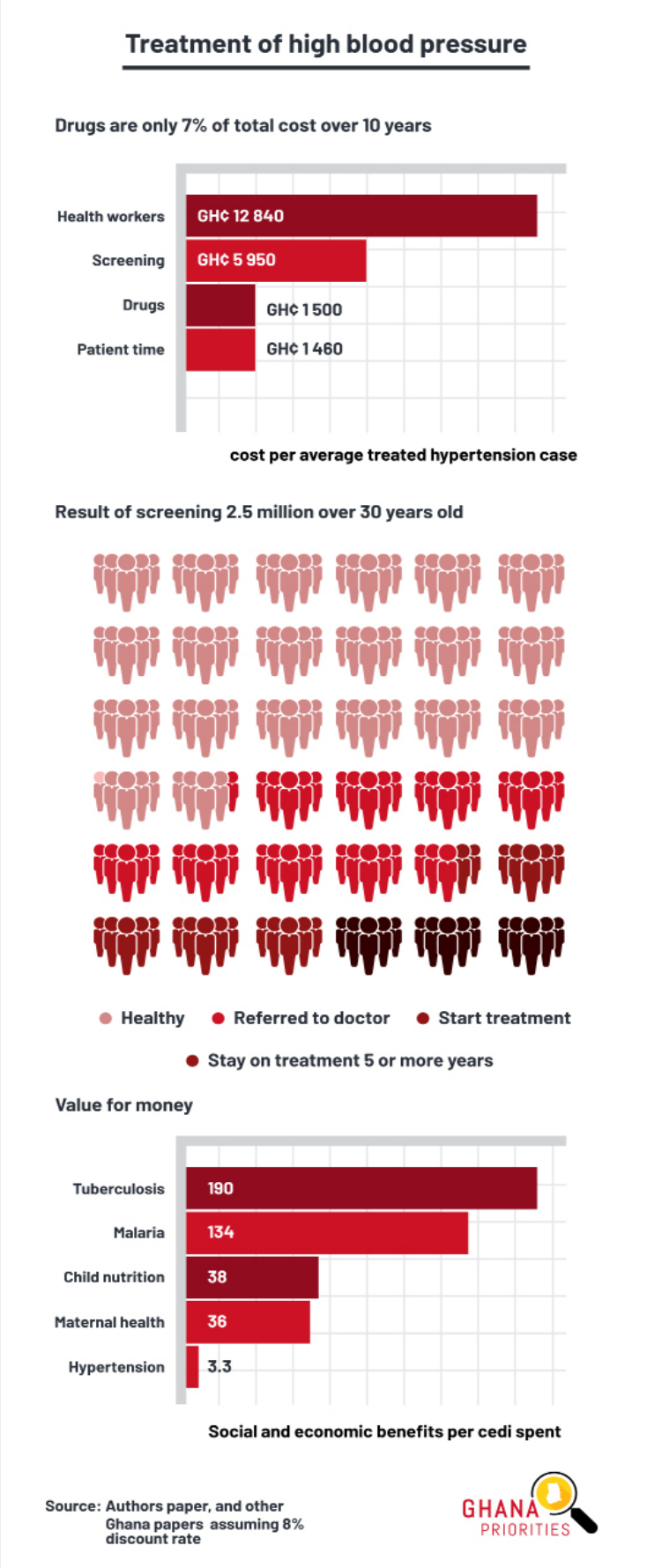
Hypertension – Ghana's Disease of the Future?

In Ghana, health care policy interventions and research budgets have traditionally been directed towards combatting communicable diseases like HIV/AIDS, malaria and tuberculosis. These are still a major public health concern, but as the country advances toward greater prosperity, the prevalence of non-communicable diseases is also rapidly increasing.

Cardiovascular diseases, cancers and diabetes are particularly on the rise in Ghana, and one of the largest risk factors for complications such as stroke and coronary heart disease is high blood pressure. The number of people suffering from hypertension increases every year, and it has become one of the most rapidly growing risk factors for disease over the last decade. Hypertensionhas been estimated to affect around 13% of working-age people in the country, and the condition is significantly more prevalent in urban areas.

Hypertension awareness and treatment levels are also very low, which increases the risk of further health complications. It has been estimated that 63% of women and 86% of men with high blood pressure in Ghana are unaware of their condition,



and amongst the hypertensive patients only 17% of women and 6% of men had treated and controlled their high blood pressure. Ghana only has one doctor per every 7000 patients, which makes diagnosing conditions such as hypertension more difficult. This situation can be improved by shifting some primary care duties, like managing high blood pressure, to non-physician health care workers, and only referring high-risk cases to doctors. Still, more needs to be done on prevention to lower the overall incidence of hypertension and reduce the risks of the serious diseases it leads to.

Decision-makers in Ghana have taken note of this growing challenge and several interventions have been tested in the past to improve awareness and treatment of hypertension, but it's difficult to design effective public health policies without comprehensive information. Resources are always limited, so it's crucial to know exactly where every cedi of public investment would do the most good. This is why Ghana Priorities, a collaboration between the National Development Planning Commission and the award-winning think tank Copenhagen Consensus, has been working to find the best policies for the countryacross all sectors of government. Throughout the last year, 28 teams of economists have conducted cost-benefit analyses to calculate the economic, social and environmental impact of more than 80 policy proposals, and the results of these studies are now published for the benefit of all Ghanaians.

Dr.Emmanuel EkowAsmah and Dr. Francis K. Andoh from the University of Cape Coast and Dr. Saleema Razvi and Dr.Brad Wong of Copenhagen Consensus examined the impact of screening

and treating hypertension. They calculated the costs and benefits of screening 2.5 million people aged 30 and above for hypertension and other cardiovascular disease risk factors. The intervention would be performed by community health workers visiting households, and individuals with high blood pressure would be referred to a health facility for further assessment and, if necessary, placed on medication. Over time, doctors would manage those with the most severe hypertension, with the rest relying on community health workers.

The researchers estimated the cost of this intervention would be GH¢ 220 million over a 10 year period. Two thirds of this cost would be for the on-going visits to the doctor or health worker. Screening for hypertension, including time and travel costs for the patients would cost GH¢ 60 million, with only GH¢10 million for the medication.

Based on population surveys, more than 250,000 new cases of hypertension would befound, some 230,000 would start medication and 30% would still continue their treatment after five years. 2900 deaths and 1100 cases of heart disease could be avoided, adding up to about 50,000 life years saved. Over ten years, the total benefits would be larger than GH¢ 700 million. Every cedi spent would yield more than 3 cedis in social and economic benefits.

While such screening and treatment could be a cost-effective use of resources to combat hypertension, Ghana's current health challenges still skew heavily towards causes like malaria, nutrition, maternal and child health. Crucially, the Ghana Priorities project has shown that many policy interventions in these areas have benefit-cost ratios many times higher, with each cedi spent on tuberculosis treatment yielding up to 190 cedis in benefits to society, or 134 cedis in the case of malaria. Clearly, most scarce resources should first be prioritized on these policies that will help the most people most effectively.

Still, beginning to focus on hypertension makes sense in two ways. First, it is still a worth while — though not amazing — use of resources. Second, as Ghana develops further and gets infectious diseases under control, hypertension will become an ever more relevant problem. It is therefore worth revisiting this analysis and policy implications once progress has been made on today's urgent health challenges.

BCR SUMMARY TABLE

TACKLING HYPERTENSION OVER A 10-YEAR PERIOD	BENEFITS (MILLION GH¢)	COSTS (MILLION GH¢)	BENEFIT-COST RATIO
Community health worker-led screening and treatment of 2.5 million people	710	220	3.3