**Background** Inequalities in the health and non-health benefits of public health interventions are a key challenge on the path to universal health coverage, particularly in LMICs. The design of HBP creates an opportunity in selecting interventions through established criteria. A quantitative analytic method was employed for integrating the distributional health and financial protection impact during the prioritization of interventions.

**Methods** Data on average health benefits, costs, disease prevalence, and population size were extracted from the GBD and latest Ethiopian essential health service package (EHSP) database, survey, and published sources. Benefits were distributed across quintiles using a combined adjusted risk of disease prevalence and coverage, with the latter used to distribute total costs. For each intervention (30 in total), a 95% target coverage (applied to current coverage vs. to the gap in coverage across quintile) was analyzed. Inequality and social welfare indices, and financial protection metrics were estimated.

**Results** Twenty-four interventions were found to improve population health and reduce health inequality, 4 interventions to reduce population health and increase health inequality, and 2 interventions to improve population health and increase health inequality. In the case of the latter two, social welfare analysis using inequality aversion parameters (φ=10) revealed that the health benefit outweighs the negative impact of health inequality.

Overall, the selected EHSP interventions provide 0.021 HALE per person in Ethiopia, with 0.034 (32% in the poorest) and 0.01 (9%) HALE gained in the richest. Similarly, a total of 76, 726 cases of CHE were averted, with 46,123 cases in the poorest and 15,151 cases in the richest.

**Conclusion** We found that improving access to the EHSP by reaching the uncovered population groups across each income group improves health equity; however, adding incremental coverage to existing coverage amplifies the existing health inequality more.

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GRAIL has created a liquid biopsy [blood] test called ‘Galleri’ to screen for fifty different very early cancers. Widespread use of the test could save 100,000 lives per year in the US from a cancer death at a cost of $950. Grail recommends annual screening for everyone over age fifty, plus screening for anyone at elevated risk for cancer related to genetic, environmental, or behavioral factors. That represents 100 million individuals in the US at a cost of $95 billion annually. I argue that such an expenditure should be a low priority item, not warranted for both reasons of justice and financial prudence. The cost per life saved would be $950,000. No American insurance company or European government would likely see that as ‘high value’ care, given that 99% of the tests each year would be negative.

This is a ‘wicked’ challenge because every proposed allocation would create a different mix of injustices. If these costs were simply added to the cancer budget, we risk the injustices of ‘onco-exceptionalism.’ If these costs were subtracted from the US cancer budget of $211 billion, most metastatic cancer care (targeted therapies) would have to be foregone. If family history alone determined elevated cancer risk, younger individuals at elevated risk for cancer related to complex, polygenic risk factors would be denied this screening at social expense (and risk premature death). Whole genome sequencing could identify those individuals at a one-time cost of $500 billion, still requiring identifying a risk cutoff. Imagine the complexity of identifying environmental carcinogenic risk factors significant enough to justify the Galleri test. Imagine the publicly perceived injustice of paying for Galleri for smokers and sun-worshippers. I argue that a process of rational democratic deliberation is needed to achieve ‘rough justice’ regarding the screening use of liquid biopsies.