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outcomes in subpopulations, stratified by persons, place, and time, capitalizing on emerging data and new technologies. Even with millions of points of biological data collected from individuals, it may well be that population-level interventions affecting housing, nutrition, poverty, access to resources, and education may have more benefit on health than individualized interventions. It is, in fact, more likely that a combination of approaches—ranging from population-wide interventions to specific interventions tailored to higher-risk groups—will be required to efficiently improve population health and narrow health disparities.

REFERENCES

- Ashley EA. The precision medicine initiative: a new national effort. JAMA 2015;313(21):2119– 2120. [PubMed: 25928209]
- Joyner MJ, Paneth N. Seven questions for personalized medicine. JAMA 2015;314(10):999–1000.
 [PubMed: 26098474]
- 3. Hollands GJ, French DP, Griffin SJ, et al. The impact of communicating genetic risks of disease on risk-reducing health behaviour: systematic review with meta-analysis. BMJ 2016; 352:i1102. [PubMed: 26979548]
- 4. Chetty R, Stepner M, Abraham S, et al. The association between income and life expectancy in the United States, 2001–2014. JAMA 2016;315(16):1750–1766. [PubMed: 27063997]
- Maas P, Barrdahl M, Joshi AD, et al. Breast cancer risk from modifiable and nonmodifiable risk factors among white women in the United States [published online May 26, 2016]. JAMA Oncol 10.1001/jamaoncol.2016.1025.
- Khoury MJ, Evans JE. A public health perspective on a national precision medicine cohort: balancing long-term knowledge generation with early health benefit. JAMA 2015;313(21):2117–2118. [PubMed: 26034952]
- 7. Khoury MJ, Iademarco MF, Riley WT. Precision public health for the era of precision medicine. Am J Prev Med 2016;50(3):398–401. [PubMed: 26547538]
- 8. Schulte PA, Whittaker C, Curran CP. Considerations for using genetic and epigenetic information in occupational health risk assessment and standard setting. J Occup Environ Hyg 2015; 12(suppl 1):S69–S81. [PubMed: 26583908]