



NEWS

Is precision medicine really best for “all of us”?



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The currently fashionable focus on precision medicine as a universal good in health care came under scrutiny recently in an opinion piece published in the *New England Journal of Medicine*. Merlin Chowkwanyun and Ronald Bayer of Columbia University and Sandro Galea of Boston University question the assumption that concentrating

resources on individuals is an agenda that will bring about the best result for whole populations. The argument is a counterpoint to expensive initiatives like All of Us, an ambitious research agenda now recruiting 1 million volunteers to be studied over 10 years at a cost of \$1.45 billion. The authors argue that extending the concept of precision medicine into the realm of public health is counter to the goals of the field. Public health initiatives are predicated on the idea that making large-scale institutional changes that affect everyone can improve overall population health. The thought-provoking argument suggests that an emphasis on genomic risk factors affecting subpopulations is too narrow a focus and that genomic promises are as-yet unproven. They fear a return to the search for “magic bullets” may undermine efforts targeted at other well-documented determinants of health, such as large-scale environmental exposures and other structural issues. They urge deeper scrutiny and an embrace of a more holistic approach closer to the roots of public health research. The opinion is available in full to subscribers at <https://www.nejm.org/doi/10.1056/NEJMp1806634>. — Karyn Hede, News Editor

Does clinical genomics have a QC problem?

A survey recently commissioned by the online publication GenomeWeb is reporting that standardization in clinical genomics is inadequate and that improvements are needed. The survey, conducted by SeraCare Life Sciences, a company that develops products for



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quality control, included more than 150 people who perform genomic sequencing for commercial enterprises. An article appearing on the GenomeWeb site, and an accompanying report, state that quality control best practices are “still evolving.” The findings revealed inconsistent use of positive controls in test runs. Most use a positive control every few runs, but 21% reported they only use positive controls on new lots and 8% reported never using a positive control. Of those who conduct noninvasive prenatal testing, 89% reported they use a positive control every few runs. Fewer respondents who work in oncology (73%) or inherited disease (63%) did so. Most of the survey respondents were managers and most worked in oncology. In addition, about half of respondents needed to stop work every few months due to a quality control issue. The stops were related to the control not passing, quality of the library prep, or instrument malfunction, according to GenomeWeb. Most stops took between one and three days to resolve. Respondents also reported that metrics such as reagent lot, operator, or instrumentation were not consistently tracked. The survey results suggest that a focus on quality control is needed in the clinical genomic testing industry.

— Karyn Hede, News Editor