

Background on Biomonitoring & Disparities: 2008 DRA Project Update Overview**DRA Project Report 08-02**

In 2008, the Disparity Reducing Advances Project revisited and updated its scans on biomonitoring, addressing advances in biomonitoring technology and practice, progress on federal activity on biomonitoring, and changes in and opportunities for the use of cell phones for biomonitoring.

Biomonitoring technology advances and interpretation

Reviewing recent developments in biomonitoring technology, the advances forecast in the DRA Project's 2006 report are generally on track. Biomonitoring will yield significant advances over the next decade, and biomonitoring advances will improve health outcomes. However, biomonitoring advances will reduce disparities only with concerted effort.

As biomonitoring advances continue, the promise of "big wins" remains, particularly in chronic disease management and cancer screening and detection. The field of research, though, remains very complex and there is a great deal of potential in many areas. Some of the most promising recent advances include: the identification of most of the unique proteins of salivary glands, allowing for expanded use of saliva testing; blood tests for Alzheimer's disease and bipolar disorder; technologies to monitor medication compliance; development of many new technologies and platforms for home monitoring and continuous passive biomonitoring; and great effort and progress in identifying cancer biomarkers for earlier detection and screening. One promising area that has shown little progress is non-invasive glucose monitoring. Additionally, for biomonitoring to be effective it must lead to change in treatment, the environment, or behavior, and complementing the research on biomonitoring has been efforts on behavior change techniques.

Federal Health Information Technology and Biomonitoring Activities

Many federal government departments and offices are working on HIT and biomonitoring, from Health and Human Services and Veterans Affairs to the Department of Defense and the Federal Communications Commission. Much of the government work is focused on the implementation of electronic health records (EHRs), but there are several projects and grant programs for telehealth and other biomonitoring technologies.

Cell Phones and Wireless Communications and Disparities

Cell phones can be used to support continuous passive biomonitoring, provide warning of disease, and reinforce healthier behavior in culturally appropriate ways. Cell phone and internet penetration rates in the United States continue to rise, making them potential tools in reducing disparities. While WiMax is unlikely to make Wi-Fi obsolete, the introduction of WiMax, along with spectrum allocation policies, may expand access to wireless communications, improving their potential as a disparity-reducing tool.

Review the full report at:

http://www.altfutures.com/draproject/pdfs/Report_08_02_DRA_Project_Biomonitoring_Update_Packet.pdf

For more information on the DRA Project, visit our website at www.altfutures.com/dra.

"The challenge is not only to anticipate the future, but to create it."

The DRA Project - Institute for Alternative Futures

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