

PRECISION MEDICINE

New Paradigms, Risks and Opportunities

Precision medicine is fundamentally changing the way therapies are being developed. It has widespread implications for everything from genomics to medical devices, and creates new models for enterprises.

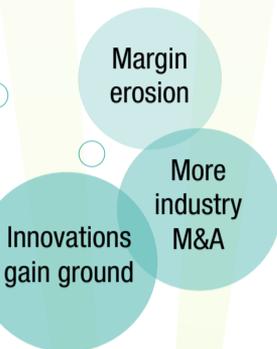


Drugmakers look beyond the pill as more blockbuster drugs come off patent

Affordable Care Act, government regulations add price pressures

Increase in M&A deals as drugmakers merge to rebuild drug pipeline

New partnerships arise with tech companies such as Google, Apple and others



'Gold rush' mentality in wearable technology

Wearables track patient lifestyle data, boosts holistic care

Novel partnerships between health care and tech firms arise

Examples of Precision Medicine

Going Beyond the Genome

Precision medicine recognizes that in addition to genomics, other -omics and factors like lifestyle and environment contribute significantly to health and disease.

Tumor Sequencing

Researchers can sequence not only a cancer patient's genome, but the tumor's genome as well, leading to more targeted, effective treatments.

One Disease or Many?

Precision medicine is deconstructing the very concept of what constitutes a particular disease. There are sub-types of a disease that should receive different treatments.

How will Precision Medicine Evolve? Some Considerations

Precision medicine therapies are at an early stage, so they're more expensive than standard care. Payers need proof outcomes are superior.

Patients identified in advance as responsive, or not, to particular drugs, can cut the cost of wasted drugs from the health care system.

Cost threshold whether to add new technology into the national health care system: \$45,000 in the U.K. and \$100,000 in the U.S.

The Role of Information Technology

In-memory technology speeds up processing and thus makes novel analysis and insights possible.

Leverage technology for R&D productivity gains in collecting, consolidating and analyzing structured and unstructured data.

Use cloud and connected care solutions for maximum impact.

New technologies make it possible to run analysis, collaboration and business processes in real time to speed time-to-market and stay ahead of precision medicine trends.



Sponsored by



© 2016 of the Wharton School of the University of Pennsylvania

