WEBINAR

TOP TAKEAWAYS

PRECISION HEALTH POSSIBILITIES AND PITFALLS

Effective partnerships and other collaborations have become an essential vehicle for advancing the precision health movement away from the traditional “one-size-fits-all” approach to disease treatment and prevention. In this second program of our Precision Health series, our panelists explored key strategic, financial, legal and regulatory compliance challenges that arise in the formation and implementation of precision health collaborations, and strategies for managing such challenges in the formation stage and throughout the lifecycle of both the collaboration and the precision health initiative.

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WHAT IS PRECISION HEALTH?

Precision health integrates into clinical care the rapid advancements in genomic sequencing to predict more accurately which treatment and prevention strategies for a particular disease will work in which groups of people to maximize outcomes and minimize side effects and overtreatment. Precision health uses biomarkers and other diagnostic test results to better understand the biology of the disease, combines an understanding of a person’s genetic makeup with the understanding of the disease’s genetic makeup to classify individuals into subpopulations that differ in their susceptibility to a particular disease and/or their response to a specific treatment, and then tailors treatment accordingly.

While the concepts of precision health and personalized medicine overlap, and the terms are sometimes used interchangeably, the National Research Council prefers the term precision medicine because “personalized” could be misinterpreted to imply that treatments and preventions are developed uniquely for each individual rather than subpopulations.

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KEY STAKEHOLDERS AND KEY INGREDIENTS

Key stakeholders in precision health innovation include patients, providers, clinical/molecular testing laboratories, biotech and other life sciences companies, pharmaceutical and medical device manufacturers, researchers, digital health companies, analytics and other information technology companies, consumer product companies, and private equity and other investors. Key ingredients include biospecimens, accelerated DNA/RNA molecular sequencing, big data and data analytics (particularly artificial intelligence), a reimbursement strategy, a regulatory compliance strategy and a collaboration strategy.

KEY PLANNING CONSIDERATIONS

a. Reimbursement for Laboratory and Other Precision-Health-Related Services

Collaborators should pressure test the feasibility of obtaining reimbursement for the targeted precision health solution, including what payer requirements and expectations apply and how they may shape the design or implementation of the precision health solution.

Precision health is still novel and largely unproven with payers. This can lead to disparities in reimbursement for similar services or payer reluctance to reimburse at all until the precision health innovation has achieved widespread acceptance. Recent developments suggest that Medicare and other payers may be moving toward models that encourage test developers to go through the US Food and Drug Administration (FDA) pre-market approval process. The FDA has adopted a flexible regulatory approach to the market approval process designed to accommodate the unique challenges of proving the analytical and clinical validity of molecular sequencing test results. However, Medicare defers to local Medicare Administrative Contractors (MACs) for their own determinations of coverage for laboratory-developed tests. Commercial payers also make their own reimbursement determinations. The individual determinations of the MACs and commercial payers may vary widely based on the evidence supporting the test, absent widespread acceptance of the test or enactment of legislative mandates. Because precision medicine testing for cancer care is the predominant clinical application of molecular testing to date, such testing is likely to blaze the trail on the precision medicine reimbursement front.

b. Data and Biospecimen Repository Strategy: Privacy Considerations

A big data strategy is critical for any precision health innovation, both for developing the test and for demonstrating its analytical and clinical validity for reimbursement purposes. In some cases, the need for a big data strategy is the catalyst for the collaborators to come together. By its very nature, a big data strategy requires the sharing, aggregation and analysis of massive amounts of biospecimens and associated clinical and molecular sequencing data from the collaborators and other sources in today's complex data ecosystem. This in turn requires a well-developed strategy for compliance with the myriad federal, state and international privacy statutes and regulations, which lack harmony as to what identifiable personal data they regulate and what standards they apply for achieving de-identification, anonymization and pseudonymization. The lack of harmony among statutory privacy protections for genomic data, biospecimens and biometric data presents special compliance challenges for precision health big data strategies. Collaborators should also anticipate and manage potential exposure to privacy-related liability in private actions brought under various state common law theories.

Rigorous upfront compliance due diligence and risk assessment is essential and should include considerations such as:

- Whether the various data sources had the right to collect and share the data
- What regulatory pathways they relied on

- Whether those pathways support the sharing and aggregation of the data for the precision health big data strategy
- Whether a de-identification pathway was used and, if so, what standard was applied
- Will traditional patient consent practices achieve sufficient transparency to mitigate the privacy compliance and liability risk
- Whether the collaborators and/or data sources are subject to special restrictions in patient consents, internal policies/procedures or third-party contracts.

Key privacy-related collaboration contracting considerations include:

- How to define the scope of data licenses or other data access and use rights (most notably, secondary data use rights) and associated access/use restrictions
- If the data terms involve an exchange of value, how the value is determined and whether it implicates any sale of data prohibitions
- If the strategy depends on de-identification or anonymization, which de-identification method and standard to use, how often de-identification must be re-validated, who will be responsible for the de-identification and who will bear the cost
- How to allocate privacy compliance responsibility and potential liability for privacy violations and data breaches.

c. FDA and Other Federal and State Regulation of Precision Health Testing

The FDA regulates precision health diagnostic tests as medical devices, potentially subjecting them to FDA pre-market and post-market controls. The Clinical Laboratory Improvement Amendments of 1988 impose certification, proficiency testing and personnel requirements (among others) on clinical laboratories that offer such tests. State laws may also impose license, permit and other requirements on such laboratories, which vary from state to state and typically apply to laboratories physically located in the applicable state. However, some state laws apply to out-of-state laboratories if they accept specimens from, or offer laboratory-developed tests to, patients in the applicable state.

To address these myriad federal and state regulatory risks, the due diligence and contracting phases of a precision health collaboration should include considerations such as:

- What type of laboratory test or other regulated technology is involved
- Whether the test or technology is FDA-regulated and, if so, what level of pre-market and post-market rigor applies
- Who is acting as the developer, manufacturer, distributor and/or purchaser of the test/technology

- How each such role affects the allocation of compliance responsibilities and potential liability throughout the lifecycle of the precision health collaboration.

d. Fraud and Abuse

Precision medicine arrangements have drawn scrutiny from federal and state regulators, including the US Department of Justice. Collaborators should carefully examine all direct and indirect financial aspects of the relationship between and among parties to the collaboration to ensure that, when considered individually and in their totality, all aspects of the arrangement meet applicable safe harbors or other compliance pathways available under federal fraud and abuse laws, regulations and guidance, including the federal Anti-Kickback Statute (AKS), the Eliminating Kickbacks in Recovery Act (EKRA) and the Civil Monetary Penalty (CMP) Law, among others, as well as their state law counterparts. The review should include consideration of:

- Referral and marketing arrangements that may implicate Office of Inspector General guidance on the permissibility of co-marketing and co-branding activities
- Patient inducement implications of marketing directed to attracting federal healthcare program beneficiaries to the precision health program
- The CMP implications of offering free precision health services to federal healthcare program beneficiaries
- The EKRA and AKS implications of payments that fall outside of fair market value ranges.

e. Other Liability Risks

Other potential liability risks that should be considered in due diligence, contractual risk allocation and ongoing risk management include potential malpractice liability risk and the potential for disputes over who owns, and who should derive financial benefit from, commercial exploitation of biological specimens. Managing both of these risks will require collaborators to navigate largely uncharted territory particularly with regard to patient consenting and other transparency practices.