The pace of innovation in personalized medicine presents a daunting challenge for health care providers. Although personalized medicines now account for nearly one of every four new molecular entities (NMEs) approved by the U.S. Food and Drug Administration (FDA), only 11 percent of patients say their doctors have discussed personalized medicine with them. Behind the relatively slow pace of adoption are multiple obstacles related to education and awareness, patient empowerment, value recognition, infrastructure and information management, and access to care.

To help providers move swiftly to integrate personalized medicine into health care, members of the Personalized Medicine Coalition’s Health Care Working Group, which includes representatives from key stakeholders in health care delivery, recently published a list of the most successful strategies for integrating personalized medicine in clinical settings as an open-access article in the journal *Personalized Medicine*. The article, titled “Strategies for Integrating Personalized Medicine into Health Care Practice,” highlights a progression of ideas to accelerate the transition from one-size-fits-all medicine toward a more personalized health care paradigm.

The table presented summarizes the research results, which are based on surveys, interviews, focus group discussions and the conversations from a national summit co-hosted by PMC and the Biotechnology Innovation Organization (BIO).


“We offer this report as a road map for the implementation of integration strategies to add more momentum toward effecting cultural change and a paradigm shift toward personalized medicine.”

- from “Strategies for Integrating Personalized Medicine into Health Care Practice,” published in *Personalized Medicine* (open access)
### Integrating Insight

**A Guide for Facilitating the Clinical Adoption of Personalized Medicine**

<table>
<thead>
<tr>
<th>1. EDUCATE STAKEHOLDERS</th>
<th>2. EMPOWER PATIENTS</th>
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<tbody>
<tr>
<td>• Develop and publish freely available and accurate information about personalized medicine on websites and social media platforms</td>
<td>• Include patient representatives when developing policies and practices related to the use of molecular information</td>
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<td>• Organize collaborative forums to agree on common terminology for describing personalized medicine</td>
<td>• Develop programs to help explain diagnostic test results to patients and facilitate access to counseling</td>
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<td>• Update current medical and pharmacy school curricula to include personalized medicine</td>
<td>• Include persons of various ethnicities, races, ages and genders in personalized medicine clinical trials</td>
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<td>• Incorporate personalized medicine into new and existing continuing medical education (CME) programs</td>
<td>• Provide counseling and other supportive services to patients before, during and after they are confronted with ethical dilemmas related to molecular information</td>
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<td>• Organize regional events at which physicians, pharmacists and community leaders raise awareness for personalized medicine</td>
<td>• Put in place and regularly update state-of-the-art cybersecurity measures to protect patients' data</td>
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<th>3. DEMONSTRATE VALUE</th>
<th>4. MANAGE CLINICAL INFORMATION</th>
<th>5. ENSURE ACCESS</th>
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<tbody>
<tr>
<td>• Organize forums at which payers, providers and the diagnostic and pharmaceutical industries discuss health technology assessment processes and the requirements necessary for coverage</td>
<td>• Include each patient’s molecular information as well as information regarding clinically actionable variants within electronic health records</td>
<td>• Identify strategies for encouraging payers to cover novel technologies</td>
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<tr>
<td>• Conduct economic impact studies that are meaningful to payers</td>
<td>• Ensure that medical, clinical support, and outcomes information is interchangeable across information technology platforms</td>
<td>• Regularly update clinical guidelines and decision support tools to ensure that they reflect best practices in personalized medicine</td>
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<td>• Describe clinical studies to serve multiple purposes, including regulatory approval and demonstration of clinical utility</td>
<td>• Develop user-friendly platforms for inputting and accessing personalized medicine data in the clinic; platforms should be a net time-saver for clinicians and should be capable of keeping pace with scientific advancements</td>
<td>• Agree on an approach to enroll patients in “basket studies” and other clinical trials focused on personalized medicine</td>
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<td>• Ensure that professional fees for personalized medicine services are adequate</td>
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<td>• Remove disincentives for using high-value services that are provided outside of network laboratories</td>
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<tr>
<td></td>
<td>• Incorporate personalized medicine principles into alternative payment and delivery models</td>
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</table>
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