Genomics and the Electronic Health Record

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December 3, 2015
Learning Health System
Analysis and application

Testing methods

Determine testing

Genotype

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Determine testing
Gather info
Plan
Testing methods
Genotype
Analysis and application
Family Hx
Phenotype
Environment
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- Gather info
- Plan
- Educate
- Consent

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- Molecular
- Next Gen. Sequencing
- Genotype
  - FastQ
  - BAM
  - VCF

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  - Variant Calling
  - Variant Annotation
  - Determine Clinical Utility

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healthy planet
<table>
<thead>
<tr>
<th>#</th>
<th>Use Case Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Incorporating Genetic Results into EHR User Interfaces</td>
</tr>
<tr>
<td>2</td>
<td>Adding genetic tests in order sets</td>
</tr>
<tr>
<td>3</td>
<td>Clinical Decision Support (CDS) identifies when a test should be ordered (pre-test alert*)</td>
</tr>
<tr>
<td>4</td>
<td>CDS identifies when a drug order is inconsistent with a test result (post-order alert*)</td>
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</tbody>
</table>

* Note pre and post order status refers to the status of the test order as opposed to the drug order