Improving Access to Genomic Medicine

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Disparities in BRCA1/2 Testing

- Black women significantly less likely to receive a physician recommendation for testing after adjusting for family history, tumor stage and characteristics, comorbidities, sociodemographic factors and attitudes about testing.

McCarthy AM et al, JCO 2015
Addressing Differences in Recommendation

- Ensure that tools have clinical utility across groups

**Figure. Genetic Testing Results by Racial/Ethnic Group**

Genetic test detection rates are reduced in underrepresented minorities compared to whites and Asians (p<0.001) likely due to disparities in accumulating race-specific variant knowledge.

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Addressing Differences in Recommendation

- Ensure that tools are effective across groups.
- Disparities in delivery of effective interventions are a quality failure.
- Focus on quality improvement:
  - Provider and patient education
  - Decision support
  - Measurement and feedback
  - Targeted process improvement projects
- Develop organizational unit to lead this and hold leadership accountable: Disparities Solution Center
Improving Access to Genomic Medicine Outside of Cancer

- **Availability**
  - Who will order the test and manage the results?

- **Affordability**
  - Who will cover the cost of the test?

- **Acceptability**
  - Is the patient comfortable with the service?

- How can we maximize access for all patient groups?

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Penchansky et al. Med Care 1981; McLaughlin, Wyszewianski HSR 2002
Who will order and manage results?

- Three categories of tests:
  - Panel testing used in specialty clinics
    - Genomic lead physician(s) for each specialty
    - Patients are symptomatic
  - Predictive testing used in primary care clinics
    - Incorporation into population health strategy
    - Patients are asymptomatic
  - Whole exome testing used in multi-disciplinary clinics
    - Specialized services focused on patients with unexplained presentations
    - Patients are symptomatic and complex
<table>
<thead>
<tr>
<th></th>
<th>Panel Testing</th>
<th>Predictive Testing</th>
<th>WES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who orders?</td>
<td>Specialist</td>
<td>PCP/Patient</td>
<td>Geneticist/ MDP</td>
</tr>
<tr>
<td>Who counsels?</td>
<td>In house</td>
<td>???</td>
<td>In house</td>
</tr>
<tr>
<td>Who does the test?</td>
<td>External/Internal</td>
<td>External</td>
<td>Internal</td>
</tr>
<tr>
<td>Who interprets?</td>
<td>Lab</td>
<td>Lab</td>
<td>Genomics service</td>
</tr>
<tr>
<td>Who manages results?</td>
<td>Specialist</td>
<td>PCP/Specialist</td>
<td>???</td>
</tr>
</tbody>
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**Equity concerns:**
- *Language*
- *Continuity*
- *Risk information*
- *Provider resources*
- *Perceptions of clinical utility*
- *Actual clinical utility*
Developing a Genomics Service

- Multiple roles in supporting delivery
  - Identification of appropriate test
  - Link to genetic counseling
  - Interpretation of results
  - Referral for management discussions
  - Variant reclassification

- Focus on diverse populations
  - Community engagement
  - Patient engagement
  - Educational tools and activities
  - Language and interpreter services
  - Navigation
  - Financial support
Who will pay for the test?

- Major challenge with insurance coverage

Heat Map Across 12 Payors in Boston Region

Process for Commercial Payors Can Be Burdensome
Hi Katrina

To make things a little easier to follow, here is a brief summary:

1. Change of managed care provider via financial services.
2. Prior authorization for confirmatory single-gene sequencing for 3 targets
3. Discussion of testing and next steps regarding continued care and possible bone marrow transplant

Re 1. The patient currently has an out of network primary care provider (PCP) – and financial services (Karla Ortha) is helping him to switch PCP to Dr. Jacob (Jake) Rosenberg (now also in CC) so we can see the patient here at MGH.
Re 2. Prior authorization is initiated (via Ellen Babine and Amy Crosby). Fallon (Payor) knows about the urgency of the request and relevance for management. We expect to hear back early next week so we can obtain the sample on Wednesday (next appointment of the patient). Related to this, is that date of service is after date of prior authorization and followed by expedited sample transfer to LMM (Heidi Rehm).
Re 3. The next steps in clinical management, assuming genetic variants are confirmed (and in the unlikely event that none or not all variants will be confirmed) will (likely) require continued care at MGH – and according to David Sykes (via Rajesh) potentially a bone marrow transplantation.

ACTION ITEMS:
- Patient can be scheduled.
- Date of service will be within the approved range OP 0032405297 valid 3/20/18-3/20/19.
- You will need to fill out the LMM req.
- David we can help with coordinating blood tube transport to LMM.

1) Change in coverage from MH Fallon to Partners ACO.
   According to Heather (was on the phone with her now), the patient now has switched effected 4/1/2018 and now has a new PCP (Dr. Siamak M (Briefly MGH was not ‘in-network’ for MH Fallon, but is ‘in-network’ with Partners ACO).
   Now he is Partners Health Care Choice ACO administrated via MassHealth Network: the switch was active 3/31st.

2) prior authorization with Fallon.
   Hi,
   Just talked with Fallon – they mentioned they had communicated the authorization to Dr. Armstrong (but maybe via fax? So not surprised the message didn’t come through) He is approved for both CPTs – OP 0032405297 valid 3/20/18-3/20/19.
   I will follow up with PFS as the patient still needs to change his plan, but has Fallon for now!
Comprehensive Medicaid Managed Care Models in the States, 2017

As of July 1, 2017

- MCO only (32 states including DC)
- MCO and PCCM (7 states)
- PCCM only (9 states)
- No Comprehensive MMC (3 states)

NOTES: CA has a small PCCM program operating in LA County for those with HIV. Three states (SC, TX and WY) use PCCM authority to operate specialized care management programs or to make PMPM payments in a Patient Centered Medical Home program; these three are not counted here as a PCCM.

SOURCE: KFF survey of Medicaid officials in 50 states and DC conducted by HMA, October 2017.
Managing Health Care Costs

- Create effective tools and systems for delivering them
- Standardize billing models = e.g. DRGs
- Develop a clinical workforce and reimbursement for their services
- Engage quality improvement systems
- Participate in the development of Medicaid ACOs including policies and other accountable care models