

Health professional education at the American Society of Human Genetics

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Health professional education at ASHG

- Reputation for quality K-12, trainee, faculty education in genetics
 - <http://www.ashg.org/education/K12.shtml>
 - [http://www.ashg.org/education/Trainees and Faculty trainees.shtml](http://www.ashg.org/education/Trainees_and_Faculty_trainees.shtml)
- Recognized need for genetics education in general health care
- Started health professional education as a strategic plan initiative in 2014
- Hired full time staff 2015



Current educational programs

- Cancer genetics workshop (with JAX)
- Next generation sequencing webinars
- Pediatric genetic testing infographics
- Virtual meeting ("*Genetics in your clinic*")
- In progress
 - Prenatal cell-free DNA screening (w/Mayo and KP)
 - Pediatric genetic testing webinar series
- Other?



Genetic Testing in Children

Testing purpose and method

Types of information



Predictive

Risk assessment
Screening
Prevention



Diagnostic

Disease identification
Prognosis
Management



Carrier

Reproductive planning



Pharmacogenetic

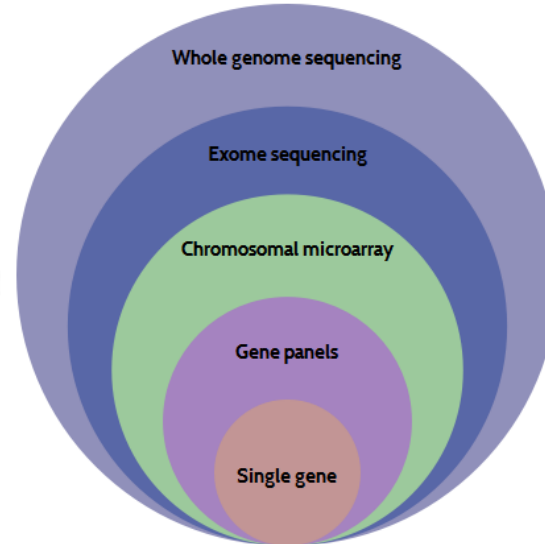
Drug efficacy



Direct-to-Consumer

Education
Research

Amount of information by method



Common principles

Testing in children

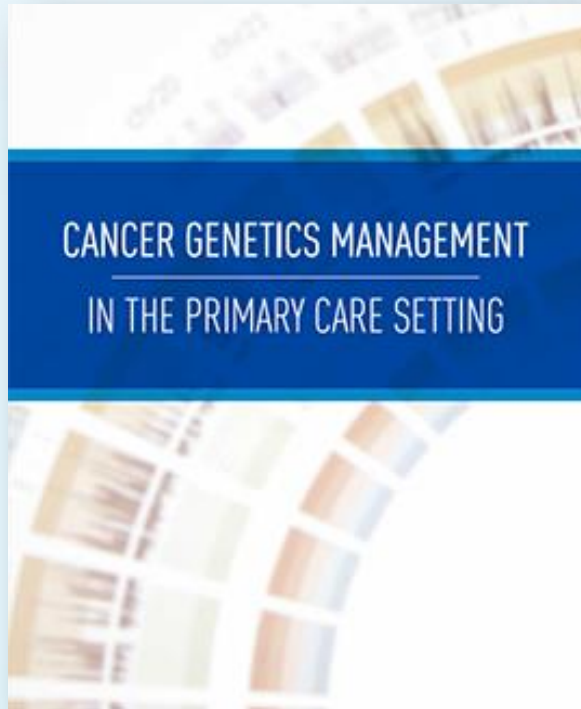


- Autonomy
- Benefit to child
- Parental decision making on behalf of the child
- Uncertainty
- Communication

Points to consider: Ethical, legal, and psychosocial implications of genetic testing in children and adolescents. American Society of Human Genetics Position Statement. American Journal of Human Genetics; 97:1, 6-21. 2015

Ethical and policy issues in genetic testing and screening of children. American Academy of Pediatrics Policy Statement. Pediatrics 131;3, 620-22. 2013

Cancer genetics workshop



- Collaboration with Jackson Laboratory
- Blended learning program
 - 6-hour workshop
 - monthly emails
 - online activities
- Case-based and interactive
- Standardized patient-provider interaction



Cancer Genetics Workshop

Five Implementations (starting in Nov, 2014)


- Each requires 4-6 faculty
- Staff time to customize content to audience

Reached over 100 primary care health professionals

- Monthly emails for one year to keep audience engaged and reinforce key messages
- Assessments every 3 months for a year
- General feedback very positive
- Increased knowledge immediately post-workshop



Challenges and Lessons Learned

- ⬇ Time and staff intensive
 - ⬇ Scheduling difficulties
 - ⬇ Only practical for small audiences
-  Produce shorter versions to accommodate different audiences and formats
- Online version to reach broader audience

Virtual Meeting

Online half-day virtual conference

Five live presentations focused on integration of genetics into primary care

Free CME and free registration

One presentation in both Spanish and English

Virtual exhibit hall

Tool kit – links to genetic resources, PowerPoints, exhibitor information



**Genetics in Your Clinic:
What You Can and Should Do Now**

Test. Interpret. Manage.



Virtual Meeting – some statistics

- Registrations: 2,045
- Meeting unique visitors: 872 (live meeting only)
- Requests for CME: 119
- Positive ratings for entire meeting and individual sessions

Attendee ratings and comments were the most positive for:

- The speakers
- The Genetics Toolkit
- Case studies



Challenges and Lessons Learned

- ⬇ Steep learning curve
- ⬇ Time and staff intensive
- ⬇ \$\$\$\$ - funded by ASHG as part of strategic plan budget
- ⬇ Reaching target audience



Work with your chosen target audience
Use an experienced vendor
Invest in marketing
Allow time for unexpected surprises

What's Next?

LMS for educational platform

- Accessibility

- Ease of use

Local outreach

- Market educational programming to local primary care health professional organizations

Collaborations

- Work with other organizations that have greater access to our target audience



Educational Programming at ASHG

- ✓ Engage with partners who can help reach the target audience
- ✓ Find champions within those organizations
- ✓ Form an advisory committee of content experts (include members of target audience)
- ✓ Develop measurable learning objectives and assessment tools
- ✓ Develop content
- ✓ Disseminate and evaluate



Educational Programming at ASHG

Make programming relevant to health care providers

- Case examples to illustrate key points

- Standardized patients whenever possible

Use multiple complementary tools to reach the audience

- Online interactive videos

- Live webinars

- Point-of-care tools

- Apps for clinical decision making or quick reference

- Face-to-face presentations: grand rounds, workshops, etc.



Can this work internationally?

Lessons Learned from International Genetics Education (IGEN, NCHPEG)

- Recognize similar challenges: Training
Interest
Few genetic professionals
Time
Resources
- Be sensitive to other priorities
- Must work within country's culture and infrastructure
Consider content, format and delivery methods
- Work with community from the beginning



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THANK YOU!



The American Society of Human Genetics
ashg.org/2016meeting