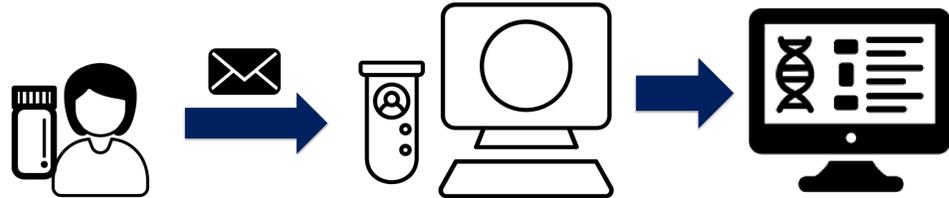


Public Health Recommendations for Healthcare Providers on Direct-to-Consumer Genetic Testing

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Background

- Increased understanding of the genome → increase the expansion of genetic testing + reduced cost → easier to gain access to personalized health information.
- Direct-to-consumer genetic testing (DTC-GT)
 - healthcare providers can be removed
 - patients, or consumers, can gain access to their personal genetic information directly
- As this field continues to grow and expand, concerns are brought to the forefront:
 - Tests allow for individuals to gain access to their personal genetic information,
 - DTCGT results are imperfect
 - Hard to apply to clinically.
 - Can be misinterpreted,
 - Stress from patients
 - Burden on healthcare system
- DTCGT continues to grow and the need for further guidance and regulation on this information will likely be needed more and more.
- From a public health perspective, DTCGT has the potential to address some of the social determinants of health barriers in genetic testing.
- However, adjustments need to be made for that to be achieved for more equitable usage. And ultimately, this expansion will lead to an increased need for genetic counselors.



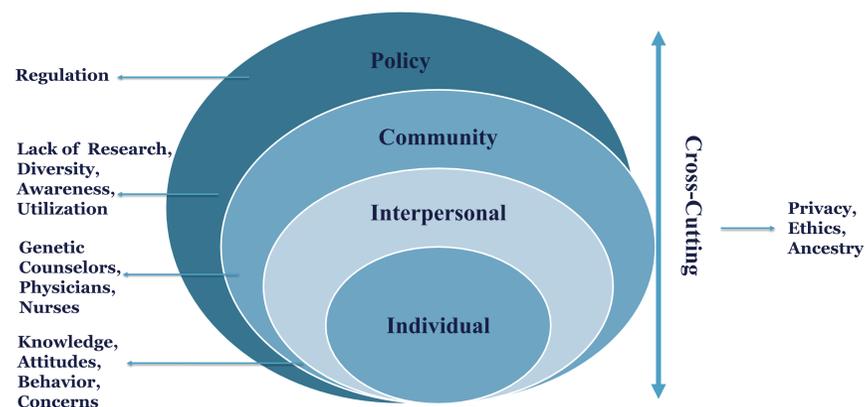
Process Plan

A snapshot of recent literature.

- 2017 to present
- “direct-to-consumer genetic testing”
- Conducted in the United States.

Research was divided among the levels of social-ecological model based on abstracts. Results were summarized by common themes.

Public health-based recommendations for providers were developed based on gaps in the social-ecological model



Objective

To create a public health centered recommendations around the social-ecological model to offer healthcare provider tangible public health based recommendations informed by the social-ecological model to identify gaps and improve utilization

Social Ecological Model

Social-Ecological Model Level	Results	Recommendation
Individual	Mixed opinions and behavior changes, overall belief in clinical utility	Expand materials addressing the pros and cons of DTC-GT for patients
Interpersonal	Varying levels of understanding among providers with no consistent plan to address patients' concerns	Increase genetic testing counseling education, specifically DTC-GT, for all healthcare providers
Community	Low involvement, understanding, and research for groups outside of early adopters	Identify community organizations to help increase involvement and access to needed downstream services
Policy	Minimal regulatory oversight on tests, despite increase from initial DTC-GT introduction	Advocate for stronger oversight to address varying utility and ensure understanding
Cross-Cutting	Consumers lack privacy for their data by DTC-GT companies and legal protections	Establish further protections for consumers within the DTC-GT market through ensured privacy and consent

Conclusion

There are no explicit public health recommendations on DTC-GT

- Part of ongoing conversation
- Ultimately, DTC-GT utilization is limited
- However, the field continues to grow
- With adjustments, gaps in the market can be mitigated to ensure more equitable understanding and utilization of these tools with appropriate responses
- Changes need to be made within the field for these tests to be utilized on a population scale appropriately.

Acknowledgements

I'd like to thank Dr. Amy Henderson Riley, Dr. John McAna, and Dr. Colin Plover for their guidance and support in development of this Capstone. Also, special thanks to my family, friends, and labmates for listening ears