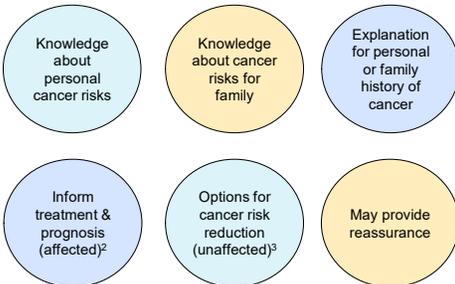


## INTRODUCTION

25% of epithelial ovarian cancer (EOC) is due to a genetic predisposition<sup>1</sup>. Genetic testing is beneficial in the following ways:



Current guidelines recommend genetic testing for all women with EOC at diagnosis<sup>3,4</sup>

- Estimated that only 35% of women are receiving testing<sup>5</sup>
- Shortage of cancer genetics healthcare professionals precludes timely access to testing<sup>9</sup>

Studies in the UK investigating oncologist-led testing showed favorable results, but limited data on gynecologic oncologists in USA<sup>7,8</sup>

## OBJECTIVES

This study sought to investigate oncologists' current genetic testing practices for EOC in order to identify successes and barriers to mainstreaming genetic testing by oncology providers for patients with EOC.

### Specific aims:

1. To assess the current practices of oncology providers regarding the ordering and use of genetic testing in patients with epithelial ovarian cancer
2. To identify the frequency with which oncology providers make referrals to genetics professionals for their patients
3. To evaluate the prevalence and types of genetics education that oncology providers have received
4. To identify the comfort level of oncology providers with different aspects of cancer genetics services

## MATERIALS & METHODS

An online survey was sent to 1,444 members of the Society of Gynecologic Oncologists (SGO)

- Eligible if currently in clinical practice in the United States
- Collected information on:
  - Participant demographics
  - Genetic testing and referral practices and barriers
  - Confidence with aspects of the genetic testing process

Descriptive statistics were calculated using Qualtrics, and all statistical analyses were performed using Stata.

- Fisher's exact test was used to determine statistical significance
- Values were significant if  $p < 0.05$

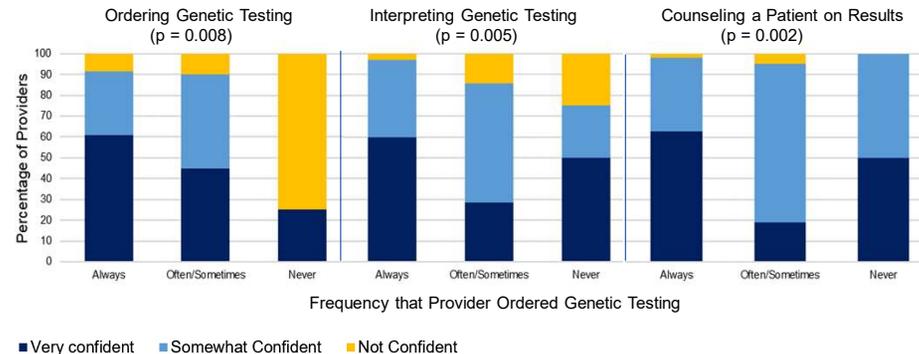
## RESULTS

With a 13% response rate (eligible  $n = 170$ ), the majority of respondents were white (85%), non-Hispanic (94%) gynecologic oncologists (82%) with 10-29 years of experience (56%) and:

- Worked in urban settings (67%) in hospitals (37%) or academic centers (54%)
- Ordered multi-gene panel testing (96%) at diagnosis (65%)
- Referred patients to genetics services before ordering testing (50%) or at diagnosis (47%)
- Received additional training in genetics through conferences (71%), and Continuing Education events (63%)
- Felt that listed barriers to testing or referrals did not apply to them, although patient disinterest and insurance coverage concerns were sometimes indicated

	I always ordered genetic testing	I often/sometimes ordered genetic testing	I never ordered genetic testing
<b>I used results to guide treatment...</b>			
<i>Always</i>	29.7%	23.8%	50.0%
<i>Often/Sometimes</i>	69.7%	76.2%	50.0%
<i>Never/Unsure</i>	0.6%	0%	0%
<b>I referred patients to cancer genetics...</b>			
<i>Always</i>	60.7%	33.3%	100%
<i>Often/Sometimes</i>	33.8%	61.9%	0%
<i>Never/Unsure</i>	5.5%	4.8%	0%
<b>Total</b>	<b>85%</b> <b>(145)</b>	<b>12%</b> <b>(21)</b>	<b>3%</b> <b>(4)</b>

Confidence between providers with different genetic testing practice significantly differed when:



## CONCLUSIONS

Oncologist-led genetic testing with appropriate referrals to genetics services for patients with EOC is a feasible alternative service delivery model.

- Majority of providers are ordering multi-gene testing at diagnosis, in compliance with NCCN and ASCO guidelines<sup>3,4</sup>
- Many providers who order testing independently are still referring patients to cancer genetics services, which can help to provide comprehensive care for patient and family members
- Results are in agreement with other similar studies<sup>5,7,8</sup>

Results of this study can guide educational outreaches and trainings to improve provider confidence with genetics services.

- Emphasize importance of referrals for positive or unclear results to ensure comprehensive care
- Improved provider confidence could lead to increased testing frequency among somewhat confident providers

## PUBLIC HEALTH IMPACT

Identifying patients with specific genetic mutations can deliver tailored therapies and lead to longer disease-free survival.

- Late-stage detection of EOC requires that genetic testing be done rapidly and correctly
- Results of this study suggest an accessible, innovative service pathway to accomplish this goal and overcome shortage of genetics professionals

Results for affected patients have the potential to impact family members and can reduce cancer mortality by informing appropriate screening and risk-reduction strategies.

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