



MSD

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Central European Cooperative Oncology Group

# A Guide To Genetic Consenting

## Module 10: Telegenetics model

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# Learning objectives

The primary purpose of this learning module is to inform and educate non-genetics HCPs on genetic consenting.

**This module will enable HCPs to:**

- Be aware of alternative models of genetic consenting
- Understand how genetic testing can guide treatment decisions in cancer



# The COVID-19 pandemic has put a further strain on counselling resources but has also created the uptake of remote counselling

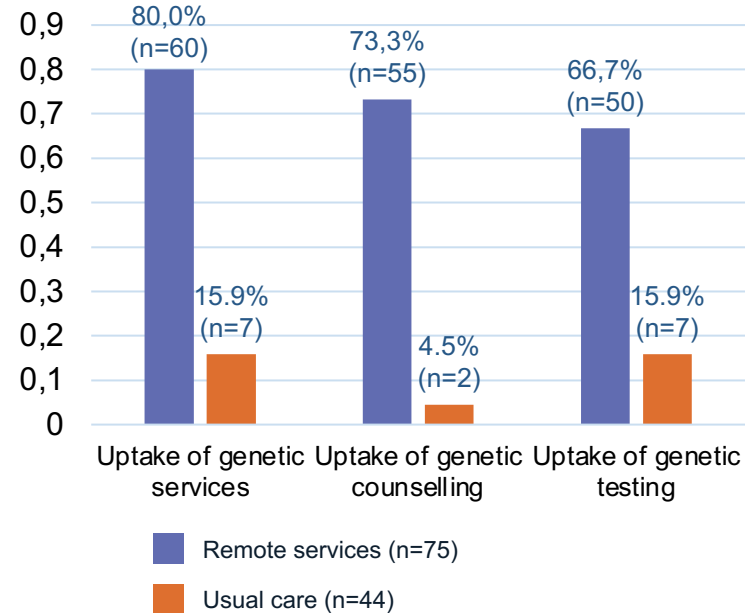


The COVID-19 pandemic has resulted in a dramatic shift toward remote working for HCPs, owing to minimised-face-to-face contact between patients and clinicians<sup>1</sup>



Genetic counselling rapidly transitioned to telemedicine at the start of the pandemic, with telegenetics already in use by some providers<sup>2</sup>

Use of remote counselling in oncology practices without genetic counsellors increases the uptake of genetic counselling and testing<sup>3</sup>



HCP=Healthcare professionals



# The telegenetics model uses telephone and video conferencing to provide genetic counselling to patients with a genetic predisposition to cancer

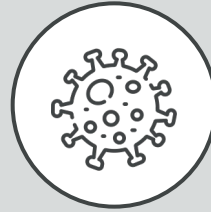
In the telegenetics model, pre- and post-test genetic counselling sessions take place over the phone or online, and may include the use of educational videos or toolkits



Telegenetics describes the use of electronic and communication technologies, such as video conferencing (e.g. Zoom), to provide genetic services to patients with a genetic predisposition to cancer, allowing for consenting and counselling to be conducted remotely<sup>1</sup>



Patients have shown high satisfaction with telegenetic services, making telemedicine a useful tool to provide routine genetic counselling and follow-ups, particularly for patients with limited access to genetic specialists<sup>1</sup>



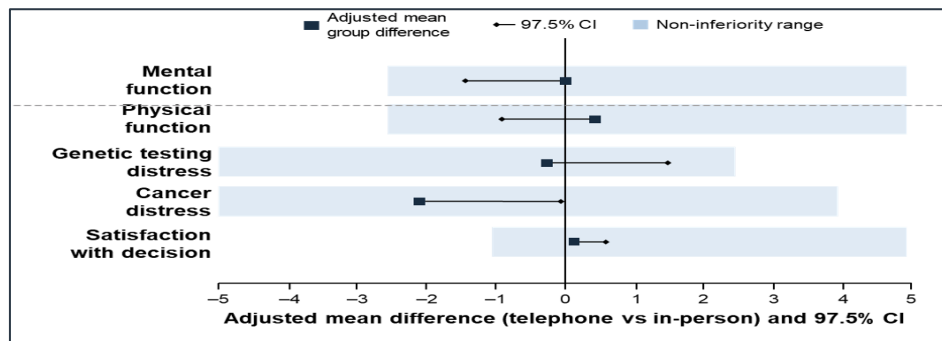
The COVID-19 pandemic rapidly increased the incorporation of telegenetic counselling into clinical practice, and the majority of geneticists support the continued use of telemedicine for genetic counselling after the pandemic<sup>2-4</sup>



# Telephone delivery of genetic services extends accessibility of genetic counselling and is non-inferior to in-person counselling



Telegenetic care was statistically non-inferior to in-person care for all outcomes



A higher uptake of risk-reducing surgery was observed for mutation carriers who completed telegenetic care compared with in-person care<sup>a</sup>

Risk management outcome	In-person (%)	Telephone (%)	X <sup>2</sup>	P
<b>RRM<sup>b,d</sup></b>				
Yes	5.0	9.6		
No	95.0	90.4	2.75	0.10
<b>Mammogram<sup>a</sup></b>				
Yes	86.9	88.05	0.10	0.75
No	13.1	11.95		
<b>MRI<sup>d</sup></b>				
Yes	32.35	28.5	0.58	0.45
No	67.65	71.5		
<b>RRSO<sup>c,d,f</sup></b>				
Yes	7.7	12.0	1.74	0.19
No	92.3	88.0		
<b>Risk-reducing surgery<sup>c,d,f</sup></b>				
Yes	10.5	17.8	4.43	0.04
No	89.5	82.2		

<sup>a</sup>We excluded participants who received definitive negative test results from all risk management analyses (n = 95; n = 50 in TC and n = 45 in UC).

<sup>b</sup>We excluded participants who had prior bilateral mastectomy at baseline from RRM analyses (n = 59; n = 31 in TC and n = 28 in UC).

<sup>c</sup>Participants who had both bilateral mastectomy and bilateral salpingo-oophorectomy prior to baseline were excluded from risk-reducing surgery analysis (N = 11; N = 4 in TC and N = 7 in UC).

<sup>d</sup>Three participants (n = 2 in TC and n = 1 in UC) obtained both bilateral mastectomy and bilateral oophorectomy following genetic testing.

These individuals are included in the analyses for RRM, RRSO, and risk-reducing surgery.

<sup>e</sup>We excluded participants who had prior bilateral mastectomy at baseline or who obtained a bilateral mastectomy during the study from mammogram and MRI (n = 59; n = 48 in TC and n = 37 in UC).

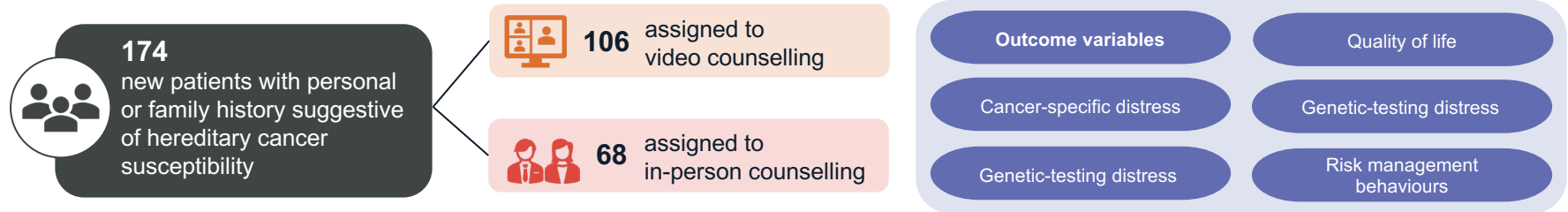
<sup>f</sup>We excluded participants who had prior bilateral salpingo-oophorectomy at baseline from the ovarian cancer risk management analysis (n = 73; n = 33 in TC and n = 40 in UC).

CI=confidence interval; RRM=risk-reducing mastectomy; RRSO=risk-reducing salpingo-oophorectomy; RRM = risk-reducing mastectomy; RRSO = risk-reducing salpingo-oophorectomy; TC = telephone genetic counselling; UC = usual care (in-person genetic counselling)

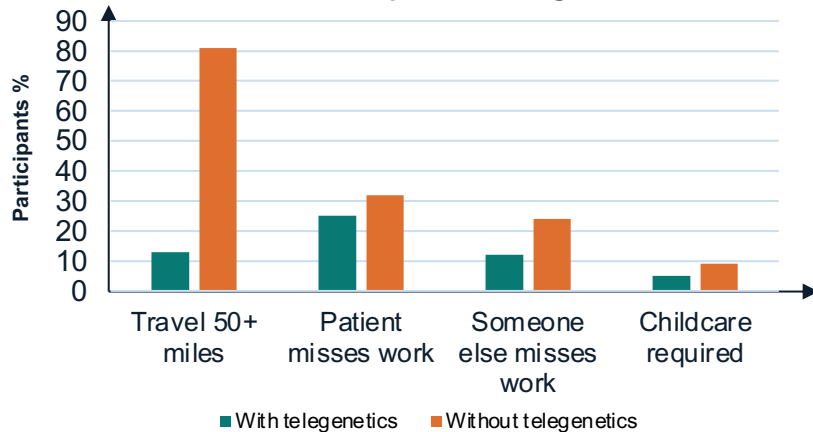
Interrante M, et al. *JNCI Cancer Spectr.* 2017;1:pkx002



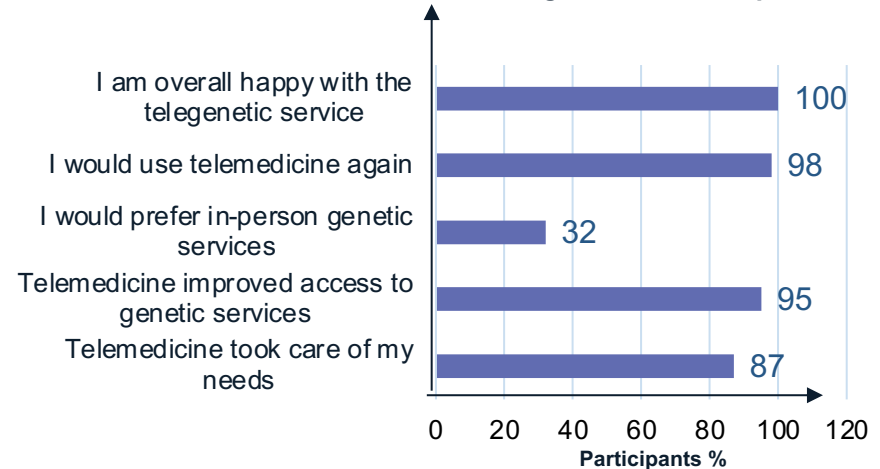
# Patient outcomes were similar when comparing delivery of genetic services via video conferencing with in-person delivery in rural areas



**Introduction of telegenetic services improved ease of access to care for patients living in rural areas**



**Patients were satisfied with the telegenetic services provided<sup>a</sup>**



# Summary

- Genetic counselling has rapidly transitioned to telemedicine, with telegenetics already in use by some healthcare providers<sup>1</sup>
- The telegenetics model uses telephone and video conferencing to provide genetic counselling to patients with a genetic predisposition to cancer
  - Patients have shown high satisfaction with telegenetic services, making telemedicine a useful tool to provide routine genetic counselling and follow-ups<sup>2</sup>

