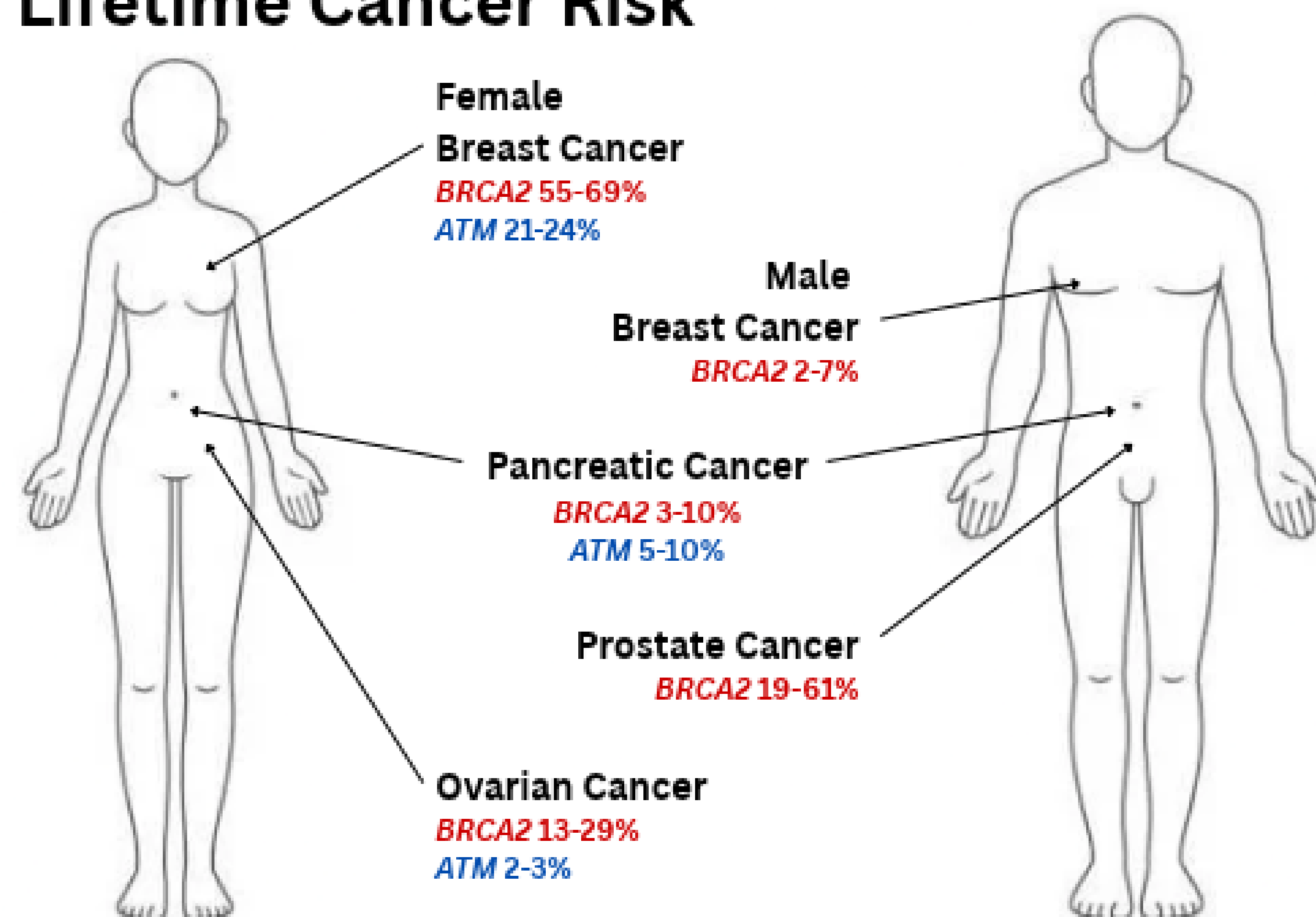


Identifying Patients with *BRCA2* and *ATM* Pathogenic Variants for Recontact About Updates to Pancreatic Cancer Screening Recommendations

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Background

BRCA2 and *ATM* Lifetime Cancer Risk



- Individuals with pathogenic or likely pathogenic (P/LP) variants in the *BRCA2* and/or *ATM* genes have an elevated risk of breast, pancreatic, and other cancers.¹
- In 2019, the National Comprehensive Cancer Network (NCCN) recommended consideration of pancreas screening for individuals with P/LP variants in *BRCA2* or *ATM* only if there was a family history of pancreatic cancer.² There were no specific screening recommendations prior.
- In 2024, the NCCN updated guidelines to recommend consideration of pancreas screening starting at age 50 with annual endoscopic ultrasound or magnetic resonance cholangiopancreatography for all *BRCA2* or *ATM* P/LP variant carriers, regardless of family history.
- Our study aimed to identify patients with P/LP variants in *ATM* and/or *BRCA2* who were not previously notified of pancreatic cancer screening recommendations who are now eligible to consider screening.
- We also sought to identify barriers and facilitators to notifying patients in diverse healthcare settings.



Keck Medical Center of USC, a university medical center



LA General Medical Center, a safety-net hospital

Methods

- Clinical information, obtained at the time of genetic counseling, was reviewed from a pedigree-based database containing key elements of personal and family cancer history, as well as genetic test results.
- Patients seen at Keck Medical Center of USC (a university medical center) and LA General Medical Center (a safety-net hospital) from 2013-2026 were reviewed, and those identified to have P/LP variants in *BRCA2* and/or *ATM* were included in the analysis.
- Genetic counseling/testing dates and family history of pancreatic cancer were analyzed to identify those not previously recommended to consider pancreas screening, and these patients' ages and cancer diagnoses were reviewed.
- Other factors potentially impacting patient recontact, including email address availability and language preference, were also reviewed.

Results

Table 1. Patient Demographics

N = 605		
Age (median, range)	(55, 15-93)	
	n, (%)	
Sex		
Male	139	(23%)
Female	466	(77%)
Race/Ethnicity		
Hispanic	280	(46%)
White, non-Hispanic	224	(37%)
Asian	77	(13%)
Black	13	(2%)
Native American	1	(0.2%)
More than one	10	(2%)
Pathogenic Variant		
<i>BRCA2</i>	449	(74%)
<i>ATM</i>	153	(25%)
Both <i>BRCA2</i> and <i>ATM</i>	3	(1%)
Hospital Site		
Norris	348	(56%)
LA General	257	(44%)
Preferred Language if Available		
Spanish	113	(27%)
English	265	(63%)
Other	44	(10%)
Email Provided		
Yes	381	(63%)
No	224	(37%)
Cancer Affected		
Yes	378	(62%)
No	227	(38%)

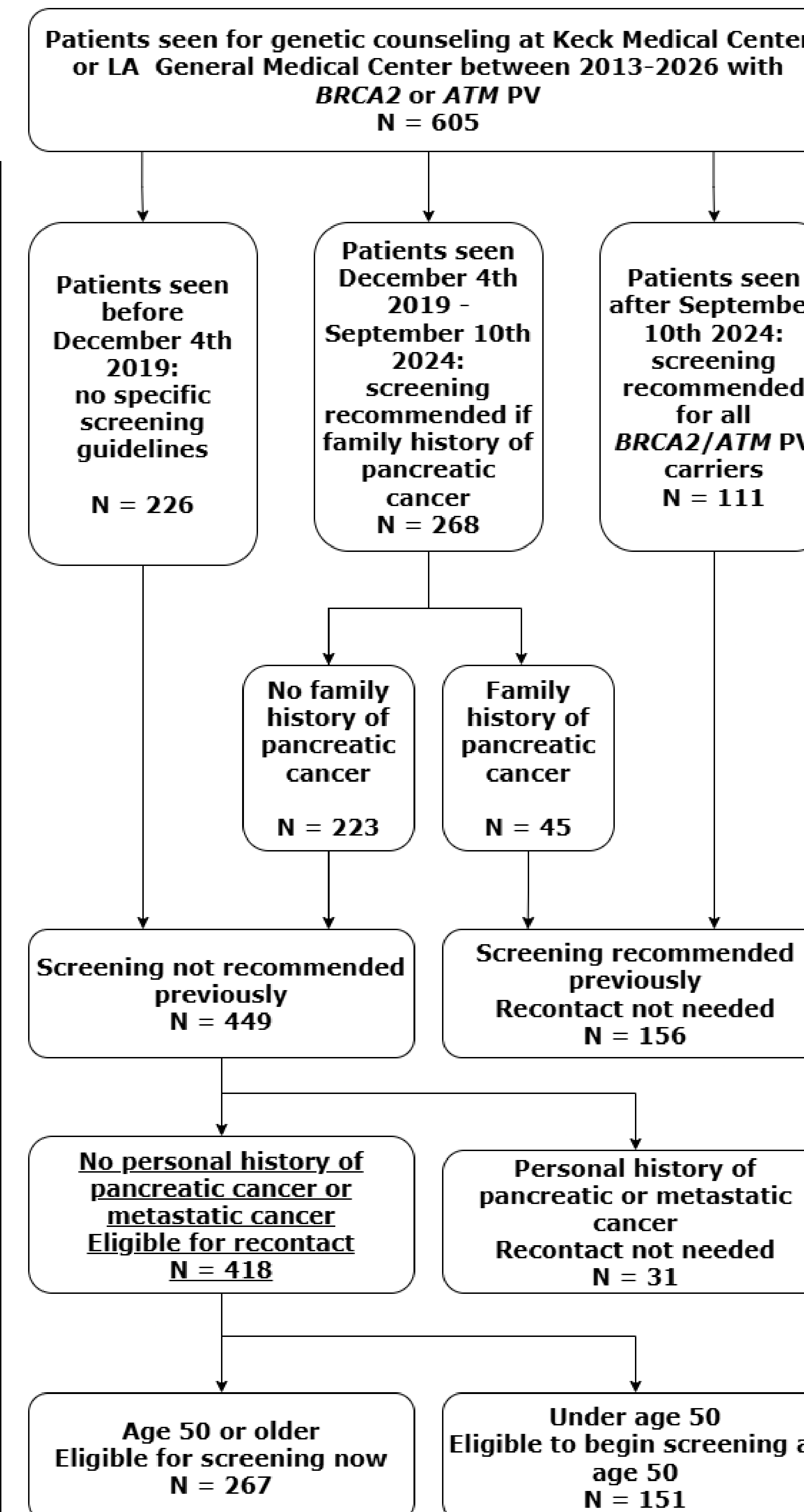
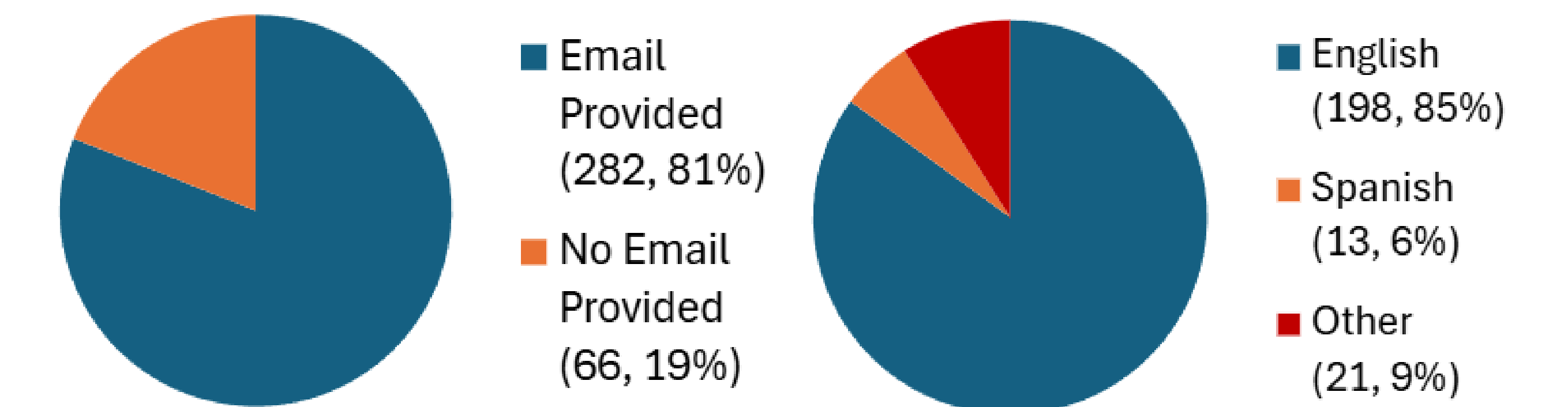
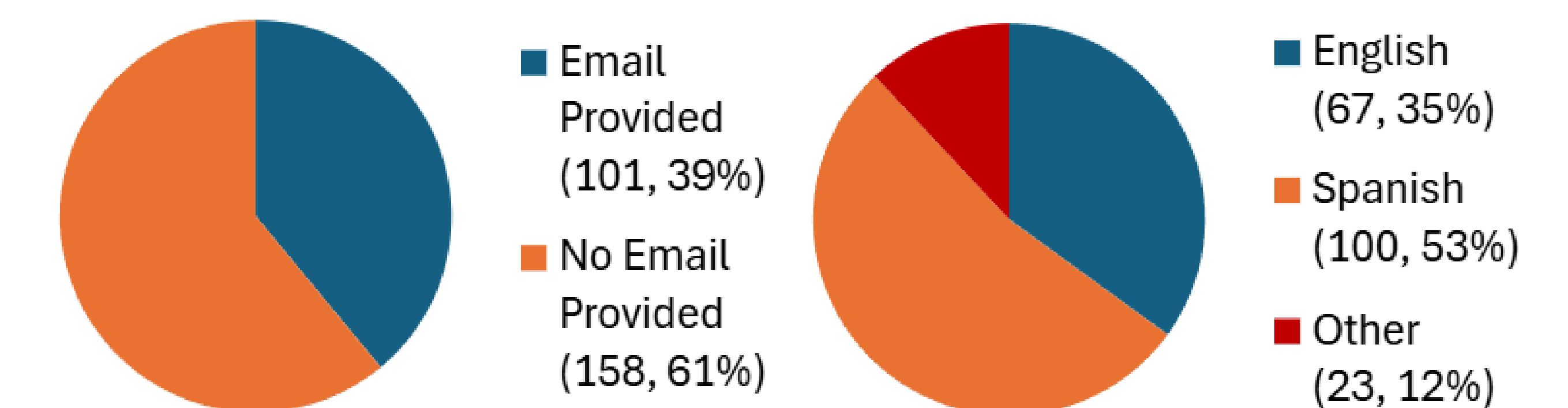


Figure 1. Identification of 418 patients currently eligible for recontact regarding screening

Results



A. Keck Medical Center



B. LA General Medical Center

Figure 2. Factors impacting patient recontact. Email availability and primary language for patients at Keck Medical Center (A) and LA General Medical Center (B)

- Of 605 individuals with a *BRCA2* or *ATM* PV seen in the last 13 years, 418 (69%) are eligible to be recontacted for screening consideration, and 267 (44%) are over age 50 and eligible to begin screening now.
- Potential barriers to patient recontact may disproportionately impact patients at LA General Medical Center, who were significantly more likely not to have provided an email address (61.0% vs. 19.0%; $\chi^2=110.9$, $p<0.001$).
- Patients at LA General were also significantly more likely to speak languages other than English when compared to those at Keck Medical Center (64.7% vs. 14.7%; $\chi^2=110.0$, $p<0.001$).

Conclusions

- Language needs and communication preferences are a key when considering recontact approaches.
- Guidelines for the clinical management of individuals with P/LPs in cancer predisposition genes will continue to evolve as new research expands our understanding.
- It is important for genetic counselors and other clinicians to develop strategies for effective communication of updated cancer screening recommendations to a diverse patient population in different healthcare settings.

References

- National Comprehensive Cancer Network. (2026). *Genetic/Familial High-Risk Assessment: Breast, Ovarian, Pancreatic, and Prostate (version 1.2027)*.
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