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# Is the public ready for a tobacco-free Ireland? A national survey of public knowledge and attitudes to tobacco endgame in Ireland

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## ABSTRACT

**Aim** Ireland will not meet the tobacco endgame goal set in its 2013 Tobacco-Free Ireland (TFI) policy of reducing smoking prevalence to less than 5% by 2025. Public opinion on tobacco endgame, a key lever to realise this goal, is uncharted in Ireland. This study aimed to measure public knowledge and attitudes to tobacco endgame.

**Methods** A telephone-administered cross-sectional survey of 1000 randomly dialled members of the general public was conducted in 2022. Prevalence of awareness, perceived achievability and support for the TFI goal and tobacco endgame measures was calculated and compared across tobacco product use status. Logistic regression identified factors independently associated with goal support.

**Findings** Although TFI goal awareness was low (34.0%), support was high (74.6%), although most (60.2%) believed it achievable beyond 2025. Product-focused measures were popular while support for supply-focused measures was mixed: for example, 86.1% supported nicotine content reduction while 40.3% supported user licencing. Phasing out tobacco sales was highly supported (82.8%); for most, this was contingent on support for currently addicted users. TFI goal support was independently associated with female sex (adjusted odds ratio (aOR) 1.47, 95% CI 1.05 to 2.07), higher education (aOR 1.80, 95% CI 1.21 to 2.66) and non-tobacco product use (aOR 2.67, 95% CI 1.66 to 4.30).

**Conclusions** Despite low awareness, tobacco endgame support is strong in Ireland. Public appetite for radically reducing tobacco product appeal and availability combined with public views on endgame achievability subject to extended timelines should be used to re-invigorate tobacco endgame discussion and planning in countries at risk of failing to meet declared targets.

## WHAT IS ALREADY KNOWN ON THIS TOPIC

- ⇒ Public support is important when considering tobacco endgame policies and is generally high in countries where it has been measured.
- ⇒ Ireland was an early adopter of tobacco endgame, but unfortunately it will likely become one of the first countries to miss its own endgame target. As endgame deadlines approach, a number of other countries are likely to find themselves in a similar situation.

## WHAT THIS STUDY ADDS

- ⇒ This study identified timely evidence of strong public appetite among the Irish population for tobacco endgame, particularly for product, institutional structure and supply-side measures.
- ⇒ The findings reinforce how the public perceive tobacco endgame as being best achieved through system-level policy options which fundamentally tackle the structures and dynamics sustaining the tobacco epidemic as opposed to through measures targeting individual-level factors.
- ⇒ The suggestion of continuing support to pursue tobacco reduction goals beyond the current target has relevance for other countries at risk of failing to meet their own endgame targets.

## HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

- ⇒ This study adds to the body of evidence regarding which tobacco endgame measures are most highly supported within a country at risk of failing to meet its declared endgame target.

## INTRODUCTION

Following strong progress in tobacco control, in 2013 Ireland was an early adopter of emerging tobacco endgame thinking, by setting a 2025 target for reducing smoking prevalence to less than 5% through government's 'Tobacco-Free Ireland' (TFI) policy.<sup>1</sup> Its bold tobacco endgame goal attracted media attention<sup>2</sup> however, its recommendations were largely grounded in strengthening established tobacco control tactics, underpinned by the WHO MPOWER model.<sup>3</sup> Since 2013, new measures introduced under TFI included graphic health warnings on cigarette packaging, plain packaging

and transposition of the European Union (EU) Tobacco Products Directive.<sup>4</sup>

Despite these actions, as of 2023, with smoking prevalence stalling at 18% and no current plans for policy review,<sup>5</sup> Ireland is on track to be the first country in the world to fail to meet its own endgame target. While precedents can have positive 'domino' effects in tobacco policy,<sup>6</sup> this inauspicious mantle may provide sceptics with evidence against tobacco endgame achievability and have wider global implications.

Public support is a key lever for tobacco policy change—it creates a low-risk political environment for policymakers and mediates policy



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implementation.<sup>6,7</sup> Support for tobacco endgame goals is high across international studies,<sup>8,9</sup> but support for specific tobacco endgame tactics varies. For example, while there is high support across different countries for reducing nicotine content in tobacco products and for Tobacco 21 laws, support for additive bans is lower.<sup>10-14</sup> Building and sharing evidence on public views can help identify gaps and priorities for tobacco endgame policymaking, and underpin successful negotiation of the complex policy process.

Given the likelihood that TFI will not be achieved by 2025, reinvigoration of endgame planning is much needed. This study aimed to assess public opinion on tobacco endgame and component measures in Ireland.

## MATERIALS AND METHODS

A nationally representative cross-sectional study was conducted to measure prevalence of public views on tobacco endgame using a literature-informed survey instrument refined through expert consultation (online supplemental appendix A).

### Sampling, recruitment and fieldwork

Sampling, recruitment and data collection were conducted by an Irish-based market research company (IPSOS MRBI) in February 2022. The target population was members of the Irish general public aged 15 years and older. Sample size was calculated based on the conservative assumption that 50% of the public reported support for TFI; 784 respondents was sufficient to measure this proportion with a 95% Confidence Interval (CI) of  $\pm 3.5\%$ .

Overall, 1000 participants were recruited for computer-aided telephone interviewing via random digit dialling using mobile and landline prefixes from the Commission for Communications Regulation. In total, 3386 individuals were contacted. Participants uncontactable by phone, non-fluent in English and who did not complete the survey in its entirety were excluded.

### Measures

The questionnaire assessed 29 primary outcome measures (online supplemental appendix B). Agreement with the TFI goal and component endgame tactics was elicited on a 5-point Likert scale, including a 'don't know' option. Responses were dichotomised ('support'/'no support'): 'support' was defined as agreement ('strongly agree'/'somewhat agree'); 'no support' was defined as absence of support ('neither agree nor disagree'/'somewhat disagree'/'strongly disagree'/'don't know').<sup>7,11</sup>

Sociodemographic characteristics and tobacco product use behaviours (online supplemental appendix C) were collected. Current tobacco and e-cigarette use status was combined into a new variable ('exclusive tobacco product use/exclusive e-cigarette use/dual use of tobacco and e-cigarettes/non-use'); respondents with current product use included those using cigarettes/e-cigarettes either regularly or occasionally. Those who responded 'don't know' (n=6) were excluded.

### Analysis

Data were analysed using IBM SPSS Statistics V.26.0. Frequency-based weights for age, sex, region and social grade were applied. Prevalence of knowledge and attitudes were calculated as weighted estimates with 95% CIs. Pearson's  $\chi^2$  test compared differences in responses between respondents using tobacco only, e-cigarettes only, both products or neither product. Multivariable logistic regression modelling was used to explore respondent factors associated with TFI goal support.

## RESULTS

In total, 1000 adults completed the survey (response rate 29.5%). Weighted sample characteristics are provided in online supplemental appendix D and online supplemental table 1. Overall, 11.0% currently used tobacco products only, 5.7% currently used e-cigarettes only and 2.6% currently used both products.

### Knowledge and attitudes to tobacco endgame

Most respondents (76.2%, 95% CI 73.6% to 78.8%) supported more government action tackling smoking-related harm. Participants were provided with a brief description of the TFI goal and asked about their support: 'The "Tobacco-Free Ireland" goal aims to reduce the proportion of Irish adults who smoke to less than 5% by 2025.' Although one-third (34.0%, 95% CI 31.1% to 36.9%) were aware of the goal, most (74.6%, 95% CI 71.9% to 77.3%) supported it and believed it was achievable (76.6%, 95% CI 74.0% to 79.2%). While few (16.5%) agreed the 2025 target achievable, most (60.2%) considered tobacco endgame achievable beyond the current target of 2025; however, a minority (16.3%) believed the tobacco endgame target was not achievable at all.

### Support for tobacco endgame measures

Overall, there was majority support for 19 of 22 specific tobacco endgame measures assessed (table 1). Support was generally higher among those who did not use tobacco products and there were significant differences in support among those who used tobacco products and those who did not for all but three measures. Two-thirds (66.7%) of those who supported a sales phase-out believed this should occur within 10 years. For most (85.0%), that support was contingent on measures for people currently addicted: increased government assistance for quitting (74.8%) or allowing smokers to buy tobacco products using a licence (40.8%).

### Factors associated with TFI support

Females (adjusted odds ratio (aOR) 1.47, 95% CI 1.05 to 2.07,  $p=0.025$ ), higher social grade members (aOR 1.47, 95% CI 1.00 to 2.15,  $p=0.049$ ), those of higher education (aOR 1.80, 95% CI 1.21 to 2.66,  $p=0.004$ ) and those who did not use tobacco products (aOR 2.67, 95% CI 1.66 to 4.30,  $p<0.001$ ) were significantly more likely to support the TFI goal than their comparative counterparts, as were older respondents (online supplemental appendix D; table 2).

## DISCUSSION

Public support can translate bold tobacco endgame ambition into reality. This is especially important for early adopters, like Ireland, where fast-approaching declared endgame targets may be missed. Besides protecting national efforts, re-invigoration is needed to avoid setting a negative precedent for global efforts. Strong public support delineated in this study confirms how much success in tobacco control has changed social norms about tobacco use and helps consolidate tobacco endgame as a legitimate concept for viable policy discussion and action in Ireland.<sup>8,9,15</sup> This study indicates that the public see tobacco endgame as being achievable, but only beyond the current policy target of 2025. However, Irish public awareness of the TFI goal was lower than was found in recent New Zealand studies,<sup>10</sup> suggesting that public support coupled with awareness may add mandate for action.<sup>10,16</sup> This underscores the urgent need to raise the profile of tobacco endgame through public engagement

Table 1 Support for tobacco endgame measures\*

Type of measure	Measure	Total sample n (%), 95% CI)	Tobacco product use n (%)	E-cigarette use n (%)	Dual use n (%)	Non-use n (%)	p Value
Product focused	<b>Lowering the nicotine content in tobacco products</b>	(N=1000)	(N=110)	(N=57)	(N=25)	(N=802)	
	Support	861 (86.1, 84.0 to 88.2)	83 (75.5)	48 (84.2)	18 (69.2)	707 (88.2)	<0.001
	No support	139 (13.9, 11.8 to 16.0)	27 (24.5)	9 (15.8)	8 (30.8)	95 (11.8)	
	<b>Lowering the nicotine content in e-cigarettes</b>						
	Support	856 (85.6, 83.4 to 87.8)	85 (77.3)	44 (77.2)	15 (57.7)	708 (88.3)	<0.001
	No support	144 (14.4, 12.2 to 16.6)	25 (22.7)	13 (22.8)	11 (42.3)	94 (11.7)	
	<b>Tighter regulation of tobacco products</b>						
	Support	790 (79.0, 76.5 to 81.5)	66 (60.6)	42 (73.7)	13 (52.0)	666 (83.0)	<0.001
	No support	210 (21.0, 18.5 to 23.5)	43 (39.4)	15 (26.3)	12 (48.0)	136 (17.0)	
	<b>Ban on added chemicals that make cigarettes seem less harsh</b>						
	Support	692 (69.2, 66.3 to 72.1)	64 (58.2)	38 (66.7)	14 (56.0)	573 (71.4)	0.015
	No support	308 (30.8, 27.9 to 33.7)	46 (41.8)	19 (33.3)	11 (44.0)	229 (28.6)	
	<b>Requiring individual health warnings on all individual cigarette sticks</b>						
	Support	639 (63.9, 60.9 to 66.9)	50 (45.5)	34 (59.6)	13 (52.0)	540 (67.3)	<0.001
No support	361 (36.1, 33.1 to 39.1)	60 (54.5)	23 (40.4)	12 (48.0)	262 (32.7)		
<b>Banning filters on cigarettes and other combustible tobacco products</b>							
Support	513 (51.3, 48.2 to 54.4)	39 (35.8)	19 (33.3)	9 (34.6)	445 (55.5)	<0.001	
No support	487 (48.7, 45.6 to 51.8)	70 (64.2)	38 (66.7)	17 (65.4)	357 (44.5)		
Institutional structure focused	<b>Requiring tobacco companies to pay the state for the health costs due to tobacco-related harm</b>						
	Support	784 (78.4, 75.9 to 81.0)	68 (62.4)	33 (57.9)	12 (46.2)	666 (83.0)	<0.001
	No support	216 (21.6, 19.1 to 24.2)	41 (37.6)	24 (42.1)	14 (53.8)	136 (17.0)	
	<b>Banning tobacco industry representatives meeting with government</b>						
Support	522 (52.2, 49.1 to 55.3)	51 (46.8)	27 (47.4)	12 (48.0)	429 (53.5)	0.471	
No support	478 (47.8, 44.7 to 50.9)	58 (53.2)	30 (52.6)	13 (52.0)	373 (46.5)		
User focused	<b>Ban on smoking tobacco products in public places</b>						
	Support	643 (64.3, 61.3 to 67.3)	31 (28.2)	25 (43.1)	13 (50.0)	570 (71.1)	<0.001
No support	357 (35.7, 32.7 to 38.7)	79 (71.8)	33 (56.9)	13 (50.0)	232 (28.9)		
Supply focused	<b>Complete phase-out of tobacco product sales</b>						
	Support	828 (82.8, 80.5 to 85.1)	73 (66.4)	46 (80.7)	21 (84.0)	686 (85.5)	<0.001
	No support	172 (17.2, 14.9 to 19.5)	37 (33.6)	11 (19.3)	4 (16.0)	116 (14.5)	
	<b>Requiring tobacco retailers to display information encouraging users to quit</b>						
	Support	819 (81.9, 79.5 to 84.3)	74 (67.3)	51 (89.5)	20 (76.9)	672 (83.8)	<0.001
	No support	181 (18.1, 15.7 to 20.5)	36 (32.7)	6 (10.5)	6 (23.1)	130 (16.2)	
<b>Banning tobacco product sales near playgrounds, schools and universities</b>							
Support	782 (78.2, 75.6 to 80.8)	76 (69.1)	43 (75.4)	17 (65.4)	645 (80.4)	0.015	
No support	218 (21.8, 19.2 to 24.4)	34 (30.9)	14 (24.6)	9 (34.6)	157 (19.6)		

Continued

Table 1 Continued

Type of measure	Measure	Total sample n (%), 95% CI)	Tobacco product use n (%)	E-cigarette use n (%)	Dual use n (%)	Non-use n (%)	p Value
Supply focused	<b>Raising the minimum legal age for purchasing tobacco products to 21 years (Tobacco 21)</b>						
	Support	706 (70.6, 67.8 to 73.4)	66 (60.0)	43 (75.4)	15 (57.7)	581 (72.4)	0.018
	No support	294 (29.4, 26.6 to 32.2)	44 (40.0)	14 (24.6)	11 (42.3)	221 (27.6)	
	<b>Restricting e-cigarette sales to over-the-counter sales in pharmacies</b>						
	Support	643 (64.3, 61.3 to 67.3)	56 (51.4)	16 (28.1)	13 (50.0)	554 (69.1)	<0.001
	No support	357 (35.7, 32.7 to 38.7)	53 (48.6)	41 (71.9)	13 (50.0)	248 (30.9)	
	<b>Allowing tobacco sales in a limited number of specially licenced shops</b>						
	Support	630 (63.0, 60.0 to 66.0)	37 (33.6)	29 (50.9)	11 (42.3)	550 (68.6)	<0.001
	No Support	370 (37.0, 34.0 to 40.0)	73 (66.4)	28 (49.1)	15 (57.7)	252 (31.4)	
	<b>Tax increases of 20%+ per year until &lt;5% of the population smoke</b>						
	Support	596 (59.6, 56.6 to 62.6)	29 (26.6)	20 (34.5)	7 (26.9)	539 (67.2)	<0.001
	No support	404 (40.4, 37.4 to 43.4)	80 (73.4)	38 (65.5)	19 (73.1)	263 (32.8)	
	<b>Reducing the number of places selling tobacco products by 95%</b>						
	Support	589 (58.9, 55.9 to 62.0)	36 (33.0)	29 (50.9)	8 (32.0)	513 (64.0)	<0.001
	No support	411 (41.1, 38.1 to 44.2)	73 (67.0)	28 (49.1)	17 (68.0)	289 (36.0)	
	<b>'Tobacco-Free Generation' policy</b>						
	Support	560 (56.0, 52.9 to 59.1)	43 (39.1)	24 (42.1)	10 (40.0)	480 (59.9)	<0.001
	No support	440 (44.0, 40.9 to 47.1)	67 (60.9)	33 (57.9)	15 (60.0)	322 (40.1)	
	<b>Restricting tobacco product sales to restricted hours of the day</b>						
	Support	501 (50.1, 47.0 to 53.2)	30 (27.3)	24 (41.4)	7 (28.0)	437 (54.5)	<0.001
No support	499 (49.9, 46.8 to 53.0)	80 (72.7)	34 (58.6)	18 (72.0)	365 (45.5)		
<b>Requiring workers that sell tobacco to undergo training to provide quitting advice</b>							
Support	459 (45.9, 42.8 to 49.0)	40 (36.4)	31 (54.4)	9 (34.6)	377 (47.1)	0.059	
No support	541 (54.1, 51.0 to 57.2)	70 (63.6)	26 (45.6)	17 (65.4)	424 (52.9)		
<b>Restricting e-cigarette sales to prescription-only access</b>							
Support	432 (43.2, 40.1 to 46.3)	38 (34.9)	15 (26.3)	8 (32.0)	368 (45.9)	0.004	
No support	568 (56.8, 53.7 to 59.9)	71 (65.1)	42 (73.7)	17 (68.0)	433 (54.1)		
<b>Tobacco user-licence</b>							
Support	403 (40.3, 37.3 to 43.4)	33 (30.0)	20 (35.1)	12 (48.0)	334 (41.6)	0.082	
No support	597 (59.7, 56.7 to 62.7)	77 (70.0)	37 (64.9)	13 (52.0)	468 (58.4)		

Use: includes daily and occasional use; Tobacco product use: currently used smoked tobacco products but not e-cigarettes; E-cigarette use: currently used e-cigarettes but not smoked tobacco products; Dual use: currently used both smoked tobacco products and e-cigarettes; Non-use: did not currently use smoked tobacco products or e-cigarettes.

\*Results are weighted and may not sum to totals.

and discussion in order to advance policy action as a political priority.

This study consolidates the emerging conceptual framework for tobacco endgame.<sup>17</sup> Levels of support for many of the endgame measures assessed in this study are well above levels of support observed both before and after implementation of Ireland's 2004 smoke-free law, where, contrary to prevailing narrative, a dramatic increase in support (from 13% to 46%) was seen for a total ban on smoking in bars/pubs.<sup>18</sup> This reference point underscores the significance for policymakers of the public's current support for tobacco action in Ireland.

Similar to other studies, product-focused measures were popular,<sup>11 12</sup> making tactics targeting nicotine content, for example, early policy options. There is already strong evidence to guide policymakers on implementation of a very low nicotine standard for cigarettes.<sup>17</sup> Both institutional structure-focused measures had majority support. Recent plans in Ireland through implementation of the EU Single-Use Plastics Directive to make the tobacco industry pay for

its waste should be used to set the stage for discussion on extending industry accountability to healthcare costs.<sup>19 20</sup>

Support for banning smoking in public places (the single user-focused measure assessed) was high, although lower among those who used tobacco products. Support for supply-focused measures varied—a tobacco retail phase-out had higher support than international findings,<sup>16 21 22</sup> and previous Irish studies,<sup>23</sup> underlining rapidly changing norms. New legislative plans for tobacco retail licencing announced in Ireland present a window of opportunity to better regulate tobacco retail in a way which is more proportionate to harm.<sup>24</sup> To date, TFI policy has been characterised by strengthening 'business-as-usual' tobacco control. High support identified in this study for specific endgame measures, especially for a tobacco retail phase-out, presents an opportunity in Ireland to critically review, augment and truly orient planning to TFI's endgame goal.

Conversely, less supported measures included prescription-only e-cigarette sales and tobacco-user licencing. In general,



support for most measures was lower among those who used tobacco products, particularly for filter bans, substantial tax increases and restricting tobacco sales hours (online supplemental appendix E). While reasons for this were not explored, measures which were less popular with those who used tobacco had an individual-level focus. Measure support across product-use categories varied. High support for measures targeting system-level factors, and the contingency of support for a tobacco retail phase-out on supports for people who currently smoke, suggests that public opinion in Ireland aligns with endgame principles emphasising action on systems-factors perpetuating the tobacco epidemic over individual-level factors.<sup>25</sup> Those leading tobacco endgame discussion seeking to leverage public support should carefully consider this important feature. New Zealand's endgame plan which translates these principles into action should be a key reference for Ireland, and other countries where progress towards endgame targets is faltering. Lower tobacco endgame support in this study among social groups bearing the heaviest burden of smoking-related disease is also an important consideration since it emphasises a need to lead equity-responsive and inclusive tobacco endgame discussions.

### Limitations

While this cross-sectional study provided a timely and efficient assessment of public views, interviewer administration potentially introduced social desirability bias and the low response rate (29.5%) means that non-response bias may affect representativeness. There was low tobacco endgame awareness, and the information provided about each policy was very brief. Lack of information on rationale and effectiveness of specific measures, particularly for less straightforward policies such as nicotine reduction or increased tobacco product regulation, may have impacted respondent's interpretation of questions and views on acceptability.<sup>26</sup> Lastly, small numbers of participants reported that they exclusively used e-cigarettes or used both tobacco products and e-cigarettes limiting analytical power to examine differences between subgroups.

### CONCLUSIONS

As global momentum gathers, this study exemplifies how involving the public in tobacco endgame discourse can inform priority-setting and help design an approach which sustains support. There is high public support in Ireland for measures that radically and finally address tobacco product design and availability rather than just increasing incremental focus on people who smoke. This demonstrates a public vision for tobacco endgame based on policies targeting systemic factors underpinning the tobacco epidemic. For early endgame adopters like Ireland, now at risk of missing declared targets, strong public support should encourage policymakers to translate aspirational goals into urgent, comprehensive planning to deliver tobacco endgame. Findings on public opinion should be shared to re-inforce international collaboration to realise collective tobacco endgame ambition.

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**Contributors** EJC and PK conceptualised and designed the study; led the acquisition, analysis and interpretation of data; and drafted the manuscript based on the work. EJC conducted the background literature research and conducted the analyses and PK provided oversight of data analyses. AS, EM and MB made substantial contributions to the acquisition of data and analysis of the work. FD made substantial contributions to the conception, design and interpretation of the work. All authors provided final review and edits of the manuscript.

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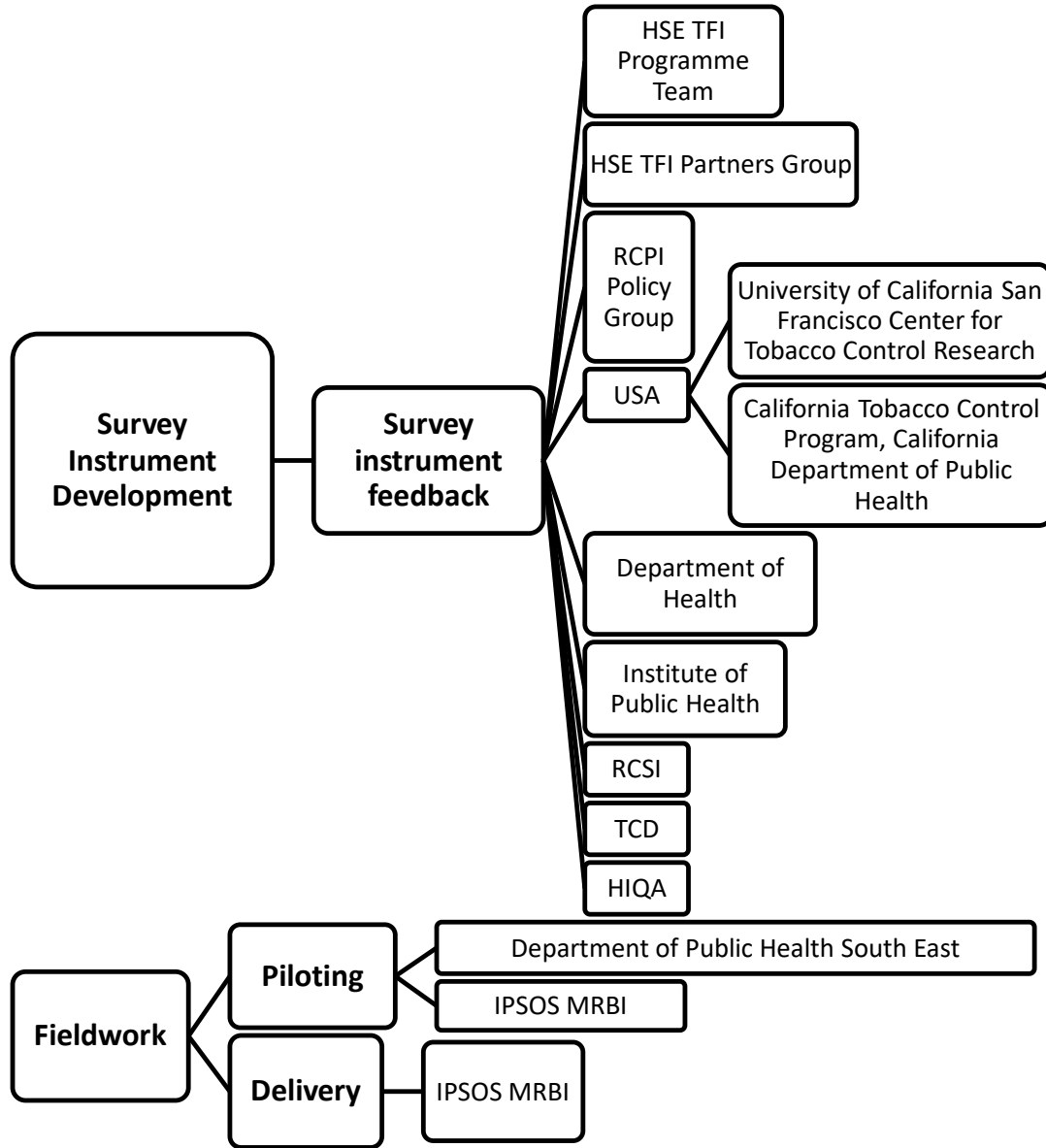
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**Appendix A: Organogram of Stakeholder Consultations and Communications**



HSE: Health Service Executive, Ireland; TFI: Tobacco-Free Ireland; RCPI: Royal College of Physicians of Ireland; RCSI: Royal College of Surgeons in Ireland; TCD: Trinity College Dublin, Ireland; HIQA: Health Information and Quality Authority, Ireland.

**Appendix B: Survey Instrument**

**Q.1.** Could I ask what age group you fall into?

15-17	1
18-24	2
25-34	3
35-44	4
45-54	5
55-64	6
65+	7

**Q.2.** Are you male or female?

Male	1
Female	2

**Q.3.** What region are you living in?

Dublin	1
Rest of Leinster	2
Munster	3
Connaught/Ulster	4

**Q.4.** To ensure we interview a wide cross-section of the public, could I first ask what the occupation of the chief income earner in your home is? (See glossary for definitions)

Social Grade A/B	1
Social Grade C1	2
Social Grade C2	3
Social Grade D/E	4
Social Grade F	5

**Q.5.** What is the highest level of education you have completed to date?

Completed primary school	1
Currently in secondary school	2
Completed secondary school	3
Currently at third level	4
Completed third level	5
No formal education	6



**Q.6a** Do you smoke tobacco products? For the purposes of this survey, tobacco products do not include e-cigarettes. **READ OUT. SINGLE CODE**

Yes	1
Yes, occasionally	2
No	3
Don't know	4

**Q.6b** Which of the following statements BEST applies to you? **READ OUT. SINGLE CODE**

I have never tried e-cigarettes	1
I have tried e-cigarettes but do not use them anymore	2
I have tried e-cigarettes and use them daily	3
I have tried e-cigarettes and still use them occasionally	4
Don't know	5

**Q.7a** Research shows that 18% of people aged 15 years and older in Ireland smoke. The Government of Ireland has a goal of becoming a tobacco-free country by 2025. This means reducing the proportion of Irish adults who smoke to less than 5%. Were you aware of this goal before now or were you not aware of this goal? **SINGLE CODE**

Yes, aware	1
No, not aware	2

**Q.7b** The 'Tobacco-Free Ireland' goal aims to reduce the proportion of Irish adults who smoke to less than 5% by 2025. Would you say you ..... **READ OUT. SINGLE CODE. FLIP SCALE**

Strongly support this goal	1
Support this goal	2
Are neutral about this goal	3
Oppose this goal	4
Strongly oppose this goal	5
Don't know	6

**Q.7c** Which of the following comes closest to your view - reducing smoking levels to less than 5% **READ OUT. SINGLE CODE. FLIP SCALE**

Is achievable by 2025	1
Is achievable but not until between 2026 and 2035	2
Is achievable but not until between 2036 and 2050	3
Is achievable but not until after 2050	4
Is not achievable at all	5
Don't know	6

**Q.8a** Now I would like to talk about the role the government and the Health Service Executive (HSE) play in achieving Ireland's Tobacco-Free Goal. To what extent do you

agree or disagree with the following? **READ OUT. SINGLE CODE PER STATEMENT.**

**ROTATE STATEMENTS. FLIP SCALE**

<b>Sufficiency of national efforts</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>
The Government should do more to tackle the harm done by smoking	1	2	3	4	5	6
The Government is doing enough to ensure that Ireland's Tobacco-Free goal is achieved	1	2	3	4	5	6
The HSE is doing enough to tackle the harm done by smoking	1	2	3	4	5	6

A: Strongly Agree; B: Somewhat agree; C: Neither Agree nor Disagree; D: Somewhat Disagree; E: Strongly Disagree; F: Don't know

**Q.8b** Moving on, I am going to ask you about a number of potential measures that might help achieve the Tobacco-Free goal. To what extent do you agree or disagree with the following? **READ OUT. SINGLE CODE PER STATEMENT. ROTATE STATEMENTS.**

**FLIP SCALE**

<b>Views on Tobacco Endgame Measures</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>
People should be required to hold an official licence to buy tobacco products	1	2	3	4	5	6
The number of places that can sell tobacco products should be reduced by 95%	1	2	3	4	5	6
Tobacco product sales should only be allowed in a limited number of specially licenced shops and banned from smaller local shops, newsagents, off-licences and petrol stations	1	2	3	4	5	6
Shops that sell tobacco products should be required to display information that encourages tobacco users to quit	1	2	3	4	5	6
People working in shops that sell tobacco products should be required to undergo training to enable them to provide quitting advice to tobacco users	1	2	3	4	5	6
The government should raise the legal age of purchasing tobacco products to 21 years and older	1	2	3	4	5	6
The government should prevent everyone who is currently under 18 from ever buying tobacco products for the rest of their lives	1	2	3	4	5	6
Tobacco product sales should be banned near playgrounds, schools and university campuses	1	2	3	4	5	6
There should be a ban on smoking cigarettes, roll-your-own cigarettes, cigars, and little cigars and cigarillos in public places	1	2	3	4	5	6
Tobacco products should only be sold during restricted hours of the day	1	2	3	4	5	6
The Government should increase the tax on tobacco products by 20% a year until less than 5% of people smoke	1	2	3	4	5	6
Tobacco products should be more tightly regulated	1	2	3	4	5	6
The amount of nicotine in tobacco products should be reduced through new laws to make tobacco products less addictive	1	2	3	4	5	6

Filters on cigarettes and other combustible tobacco products should be banned to make the products more difficult to tolerate	1	2	3	4	5	6
Added chemicals that make cigarettes seem less harsh should be banned to make cigarettes more difficult to tolerate	1	2	3	4	5	6
Individual health warnings should be required to be printed on all individual cigarette sticks	1	2	3	4	5	6

A: Strongly Agree; B: Somewhat agree; C: Neither Agree nor Disagree; D: Somewhat Disagree; E: Strongly Disagree; F: Don't know

**Q.8bi** Which of the following, if any, comes closest to your own view on the sale of tobacco products? **READ OUT. SINGLE CODE. ROTATE. FLIP CODES. INTERVIEWER INSTRUCTION: IF RESPONDENT ASKS, PHASING OUT OF TOBACCO SALES MEANS THE SALE OF TOBACCO PRODUCTS IN IRELAND WOULD BE GRADUALLY DISCONTINUED.**

Tobacco product sales should be phased out	1
Tobacco product sales should be phased out but only if the government provides assistance to help smokers to quit	2
Tobacco product sales should be phased out but only if existing smokers can continue to buy tobacco products using a licence	3
Tobacco product sales should be phased out but only if the government provides assistance to help smokers to quit AND existing smokers can continue to buy tobacco products using a licence	4
Tobacco product sales should not be phased out	5
None of these/other option	6
Don't know	7

**Q.8bii** Over how many years do you think tobacco product sales should be phased out?

\_\_\_\_\_ years  
 Over less than one year ..... 98  
 Don't know ..... 99

**Q.8c** Now I would like to discuss measures which target the tobacco industry. To what extent do you agree or disagree with the following? **READ OUT. SINGLE CODE PER STATEMENT. ROTATE STATEMENTS. FLIP SCALE**

Views on Industry Focused Tobacco-Endgame Measures	A	B	C	D	E	F
Tobacco companies should be required to pay the state for the health costs due to the harm caused by tobacco products	1	2	3	4	5	6
Representatives linked to the tobacco industry should be banned from meeting with government officials	1	2	3	4	5	6

A=Strongly Agree; B=Somewhat agree; C=Neither Agree nor Disagree; D=Somewhat Disagree; E=Strongly Disagree; F=Don't know

**Q.8d** Moving on to regulatory measures for e-cigarettes. To what extent do you agree or disagree with the following? **READ OUT. SINGLE CODE PER STATEMENT. ROTATE STATEMENTS. FLIP SCALE**

<b>Views on E-cigarette Restrictions</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>
E-cigarettes should only be available over the counter through pharmacies	1	2	3	4	5	6
E-cigarettes should only be available by prescription from a doctor	1	2	3	4	5	6
The amount of nicotine in e-cigarettes and/or e-liquid should be limited so they are less addictive	1	2	3	4	5	6

A=Strongly Agree; B=Somewhat agree; C=Neither Agree nor Disagree; D=Somewhat Disagree; E=Strongly Disagree; F=Don't know

**Glossary: British National Readership Survey Social Grade Classification System**

<b>Social Grade A</b>	Professional people, very senior managers in business or commerce or top-level civil servants. Retired people and their widows, previously grade A.
<b>Social Grade B</b>	Middle management executives in large organisations with appropriate qualifications. Principal officers in local government and the civil service. Top management or owners of small business, education and service establishments. Retired people, and their widows, previously grade B.
<b>Social Grade C1</b>	Junior management, owners of small establishments, and all others in non-manual positions. Retired people, and their widows, previously grade C1.
<b>Social Grade C2</b>	All skilled manual workers, and those manual workers with responsibility for other people. Retired people, and their widows, previously grade C2, with pensions from their job/late husband's job.
<b>Social Grade D</b>	All semi-skilled and unskilled manual workers, and apprentices and trainees to skilled workers. Retired people, and their widows, previously grade D, with pensions from their job/late husband's job.
<b>Social Grade E</b>	All those entirely dependent on the state long-term, through sickness, unemployment, old age or other reasons. Retired persons who receive only the standard basic state pension. Widows who receive only widows benefit. Those unemployed for a period exceeding six months. Casual or intermittent workers and those without a regular income.
<b>Social Grade F</b>	F1 - Farmers or farm managers of holdings of 50 acres or more and their dependents. F2 - Farmers or farm managers of holdings of less than 50 acres. Farm workers and farm labourers and their dependents.

**Appendix C: Data Dictionary**

No.	Variable	Type of variable	Description	Original Coding	Recoding
1.	Age (years)	Categorical	Age group of participant	1=15-17, 2=18-24, 3=25-34, 4=35-44, 5=45-54, 6=55-64, 7=65+	1=15-24 (1,2), 2=25-44 (3,4), 3=45-64 (5,6), 4=65+ (7)
2.	Sex	Categorical	Sex of participant	1=Male, 2=Female	0=Female (2), 1=Male (1)
3.	Region	Categorical	Region where participant resides	1=Dublin, 2=Rest of Leinster, 3=Munster, 4=Connaught/Ulster	0=Leinster (1,2), 1=Munster (3), 2=Connaught/Ulster (4)
4.	Social grade	Categorical	Social grade of participant	1=AB, 2=C1, 3=C2, 4=DE, 5=F	0=Higher (1,2), 1=Lower (3,4), 2=Farmer (5)
5.	Educational attainment	Categorical	Highest level of education attained	1=Completed primary school, 2=Currently in secondary school, 3=Completed secondary school, 4=Currently at third level, 5=Completed third level, 6=No formal education	0=Higher (5), 1=Lower (1-4,6)
6.	Current smoking status	Categorical	Whether participant currently smokes tobacco products excluding e-cigarettes	1=Yes, smokes tobacco products, 2=Yes, smokes tobacco products occasionally, 3=No, 4=Don't know	0=Does not smoke tobacco products (3), 1=Smokes tobacco products (1,2), Missing=Don't know (4)
7.	Current E-cigarette use status	Categorical	Whether participant currently uses e-cigarettes	1=I have never tried e-cigarettes, 2=I have tried e-cigarettes but do not use them anymore, 3=I have tried e-cigarettes and use them daily, 4=I have tried e-cigarettes and use them occasionally, 5=Don't know	0=No current e-cigarette use (1,2), 1=Current e-cigarette use (3,4), Missing=Don't know (5)
8.	Current tobacco product use status	Categorical	Whether participant currently uses tobacco products or e-cigarettes or both	Composite variable derived from variables 6. And 7.	0=No current tobacco product or e-cigarette use, 1=Exclusive tobacco product use, 2=Exclusive e-cigarette use, 3=Dual tobacco product and e-cigarette use, Missing=Don't know
9.	TFI goal awareness	Categorical	Whether participant is aware of TFI goal	1=Yes, aware, 2=No, not aware	0=Not aware (2), 1=Aware (1)
10.	TFI goal support	Categorical	Whether participant supports the TFI goal	1=Strongly agree, 2=Somewhat agree, 3=Neither agree nor disagree, 4=Somewhat disagree, 5=Strongly disagree, 6=Don't know	0=No support (3,4,5,6), 1=Support (1,2)
11.	TFI goal perceived achievability	Categorical	Whether participant believes the TFI goal is achievable	1=Is achievable by 2025, 2=Is achievable but not until between 2026 and 2035, 3=Is achievable but not until between 2036 and 2050, 4=Is achievable but not until after 2050, 5=Is not achievable at all, 6=Don't know	0=Not achievable/Don't know (5,6), 1=Achievable (1,2,3,4)



**Appendix C: Data Dictionary (Continued)**

No.	Variable	Type of variable	Description	Original Coding	Recoding
12.	TFI goal achievability timeframe	Categorical	Timeframe by which participant believes the TFI goal is achievable	As above	1=Is achievable by 2025, 2=Is achievable but beyond 2025, 3=Is not achievable/Don't know
13.	View on government action on smoking-related harm	Categorical	Whether participant agreed government should do more to tackle smoking-related harm	1=Strongly agree, 2=Somewhat agree, 3=Neither agree nor disagree, 4=Somewhat disagree, 5=Strongly disagree, 6=Don't know	0=Do not agree/Don't know (3,4,5,6), 1=Agree (1,2)
14.	View on HSE action on smoking-related harm	Categorical	Whether participant agreed the HSE is doing enough to tackle smoking-related harm	1=Strongly agree, 2=Somewhat agree, 3=Neither agree nor disagree, 4=Somewhat disagree, 5=Strongly disagree, 6=Don't know	0=Do not agree/Don't know (3,4,5,6), 1=Agree (1,2)
15.	View on government commitment to TFI goal	Categorical	Whether participant agreed Government is doing enough to ensure TFI is achieved	1=Strongly agree, 2=Somewhat agree, 3=Neither agree nor disagree, 4=Somewhat disagree, 5=Strongly disagree, 6=Don't know	0=Do not agree/Don't know (3,4,5,6), 1=Agree (1,2)
16.- 37.	Support for 21 component endgame measures (as outlined in Appendix F)	Categorical	Whether participant supported proposed endgame measures	1=Strongly agree, 2=Somewhat agree, 3=Neither agree nor disagree, 4=Somewhat disagree, 5=Strongly disagree, 6=Don't know	0=No Support (3,4,5,6), 1=Support (1,2)
38.	Support for a tobacco sales phase-out	Categorical	Whether participants supported a tobacco sales phase-out	1=Support with no conditions, 2=Support if the government provides assistance to help smokers to quit, 3=Support but only if existing smokers can continue to buy tobacco products using a licence, 4=Support but only if conditions in both 2. and 3. are met, 5=Does not support, 6=Don't know	0=No support(5,6), 1=Support (1,2,3,4)
39.	Acceptable phase-out timeline	Categorical	Timeframe within which participants supported a tobacco sales phase-out	Enter as given, 11=11 years or longer, 12=less than 1 year, 13=Don't know	1=0-5 years, 2=6-10 years, 3=>10 years, 4=Don't know

## Appendix D: Supplementary Tables

Supplementary Table 1: Participant Characteristics (N=1,000)

Variable	Valid Denominator	Total		Comparative Population Estimate
		N	%	
<b>Sex</b>	1,000			
Male		491	49.1	48.8 <sup>a</sup>
Female		509	50.9	51.2 <sup>a</sup>
<b>Age (years)</b>	1,000			
15-24		159	15.9	15.8 <sup>b</sup>
25-44		347	34.7	34.5 <sup>b</sup>
45-54		311	31.1	31.2 <sup>b</sup>
65+		183	18.3	18.5 <sup>b</sup>
<b>Region</b>	1,000			
Leinster		558	55.8	55.3 <sup>c</sup>
Munster		267	26.7	26.9 <sup>c</sup>
Connaught/Ulster		175	17.5	17.8 <sup>c</sup>
<b>Social grade</b>	1,000			
Higher (A,B,C1)		435	43.5	43.5 <sup>d</sup>
Lower (C2,D,E)		505	50.5	50.5 <sup>d</sup>
Farmer (F)		60	6.0	6.0 <sup>d</sup>
<b>Educational attainment**</b>	1,000			
Higher		544	54.4	53.0 <sup>e</sup>
Lower		456	45.6	47.0 <sup>e</sup>
<b>Current tobacco product use status***</b>	994			
Exclusive tobacco product use		110	11.0	16.9 <sup>f</sup>
Exclusive e-cigarette use		57	5.7	2.9 <sup>f</sup>
Dual use		25	2.6	1.1 <sup>f</sup>
Non-use		802	80.7	79.1 <sup>f</sup>

\*Estimates for general adult population ≥15 years presented as available from sources; \*\*Higher: had completed third level education, lower: had not completed third level education; \*\*\* Tobacco product use: currently used smoked tobacco products but not e-cigarettes; E-cigarette use: currently used e-cigarettes but not smoked tobacco products; Dual use: currently used both smoked tobacco products and e-cigarettes; Non-use: did not currently use tobacco products or e-cigarettes; **a:** Census, 2022; **b:** Census, 2016; **c:** Census, 2016; **d:** Association of Irish Market Research Associations Estimates May 2020; **e:** Labour Force Survey, 2021 (pertains to persons aged 25-64 only); **f:** Healthy Ireland Survey, 2021.

**Population Estimates: Sources**

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- c. Central Statistics Office. Statistical Yearbook of Ireland 2016; Census Dublin: CSO, 2022. Available: <https://www.cso.ie/en/releasesandpublications/ep/p-syi/psyi2016/people/cen/> [Accessed 16 Nov 2022].
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- f. Department of Health in Ireland. Healthy Ireland Summary Report 2021. Dublin: Health Service Executive, 2021.

**Supplementary Table 2: Multiple Logistic Regression Modelling Analysis of Participant Characteristics and TFI Goal Support (N=995)**

Characteristic	Unadjusted OR (95% CI)	Adjusted OR (95% CI)	P-value
<b>Sex</b>			
Male	1	1	
Female	<b>1.76 (1.31-2.35)</b>	<b>1.47 (1.05-2.07)</b>	<b>0.025</b>
<b>Age (years)</b>			
15-24	1.05 (0.64-1.71)	1.60 (0.89-2.89)	0.117
25-34	1	1	
35-44	1.13 (0.71-1.82)	1.29 (0.74-2.24)	0.364
45-54	1.17 (0.72-1.92)	1.29 (0.72-2.29)	0.395
55-64	1.09 (0.65-1.82)	1.64 (0.89-3.03)	0.117
≥65	<b>1.72 (1.03-2.86)</b>	<b>3.70 (1.95-7.00)</b>	<b>&lt;0.001</b>
<b>Region</b>			
Leinster	1	1	
Munster	1.08 (0.77-1.52)	0.96 (0.64-1.43)	0.825
Connaught/Ulster	1.02 (0.69-1.50)	0.88 (0.56-1.37)	0.563
<b>Social grade</b>			
Lower (C2,D,E)	1	1	
Higher (A,B,C1)	<b>1.94 (1.43-2.62)</b>	<b>1.47 (1.00-2.15)</b>	<b>0.049</b>
Farmer	<b>4.36 (1.83-10.42)</b>	<b>4.06 (1.45-11.35)</b>	<b>0.008</b>
<b>Educational attainment*</b>			
Lower	1	1	
Higher	<b>1.73 (1.30-2.30)</b>	<b>1.80 (1.21-2.66)</b>	<b>0.004</b>
<b>Current tobacco product use status**</b>			
Exclusive tobacco product use	1	1	
Exclusive e-cigarette use	0.90 (0.47-1.71)	1.08 (0.52-2.24)	0.833
Dual use	1.03 (0.43-2.45)	0.89 (0.34-2.28)	0.803
Non-use	<b>3.13 (2.07-4.73)</b>	<b>2.67 (1.66-4.30)</b>	<b>&lt;0.001</b>
<b>Prior awareness of the TFI goal</b>			
Unaware	1	1	
Aware	1.11 (0.82-1.50)	1.00 (0.70-1.44)	0.992
<b>Believed TFI goal was achievable</b>			
No/Unsure	1	1	
Yes	<b>4.03 (2.95-5.53)</b>	<b>5.04 (3.38-7.52)</b>	<b>&lt;0.001</b>

\*Higher: had completed third level education, lower: had not completed third level education; \*\*

Tobacco product use: currently used smoked tobacco products but not e-cigarettes; E-cigarette use: currently used e-cigarettes but not smoked tobacco products; Dual use: currently used both smoked tobacco products and e-cigarettes; Non-use: did not currently use tobacco products or e-cigarettes; OR: odds ratio; CI: Confidence interval; Nagelkerke  $r^2 = 0.233$ ; Percentage Accuracy in Classification = 79.4%; Bold font indicates  $p < 0.05$ ; Adjusted for sex, age, region, social grade, tobacco product use, prior TFI goal awareness and perceived achievability of the TFI goal.

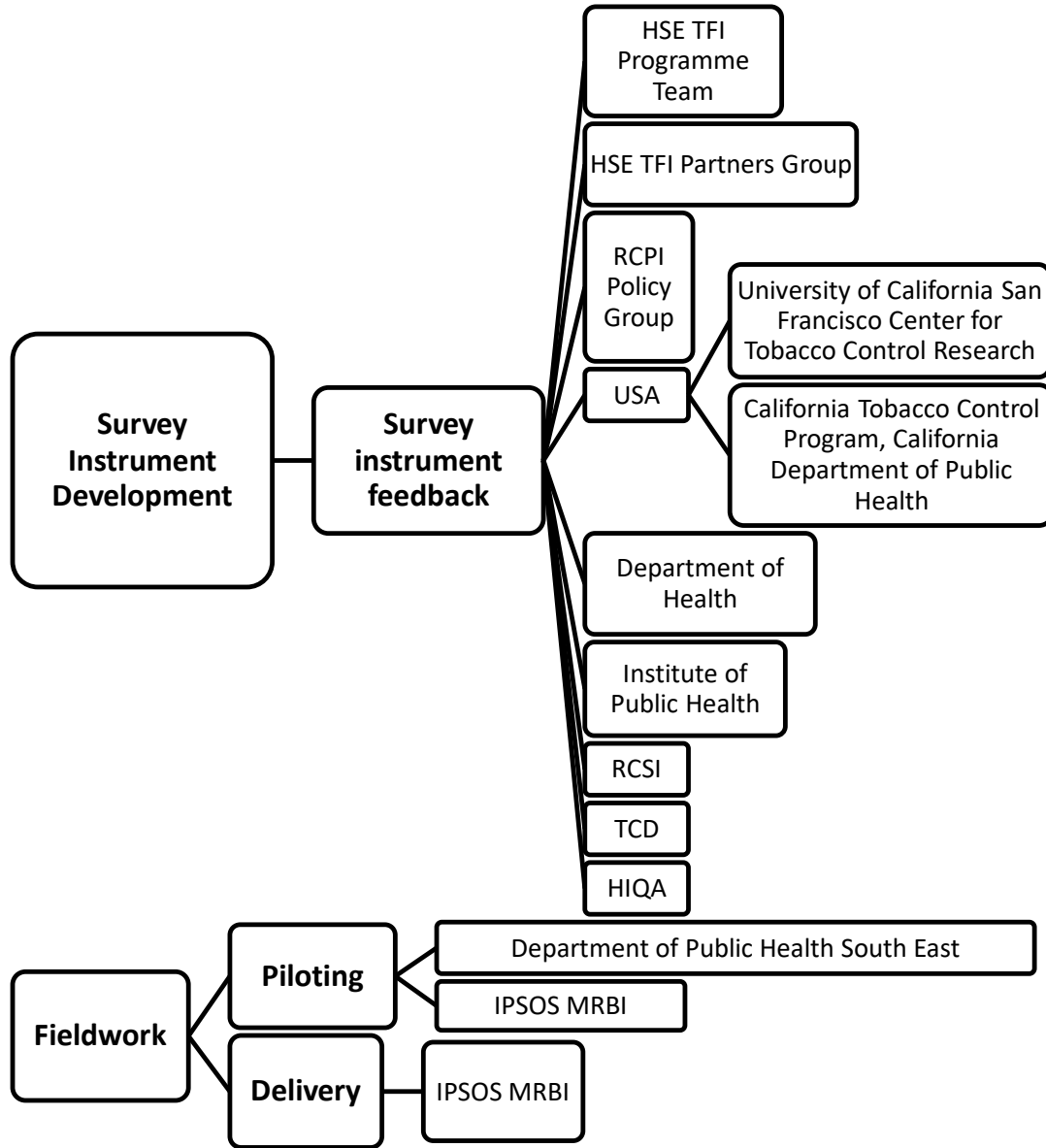
**Appendix E: Summary of Public Support Levels for Tobacco Endgame Measures**

Category	Tobacco Endgame Measure	Support*				
		Total sample	Tobacco product use**	E-cigarette use	Dual use***	Non-use
Product-Focused	Lowering the nicotine content in tobacco products	High	High	High	Majority	High
	Lowering the nicotine content in e-cigarettes	High	High	High	Majority	High
	Tighter regulation of tobacco products	High	Majority	High	Majority	High
	Ban on added chemicals that make cigarettes seem less harsh	Majority	Majority	Majority	Majority	High
	Requiring individual health warnings on all individual cigarette sticks	Majority	Low	Majority	Majority	Majority
	Banning filters on cigarettes and other combustible tobacco products	Majority	Low	Low	Low	Majority
Institutional Structure-Focused	Requiring tobacco companies to pay for tobacco-related health costs due to tobacco-related harm	High	Majority	Majority	Low	High
	Banning tobacco industry representatives meeting with government	Majority	Low	Low	Low	Majority
User-Focused	Ban on smoking tobacco products in public places	Majority	Low	Low	Majority	High
Supply-Focused	Complete phase-out of tobacco product sales	High	Majority	High	High	High
	Requiring tobacco retailers to display information encouraging users to quit	High	Majority	High	High	High
	Banning tobacco product sales near playgrounds, schools and universities	High	Majority	High	Majority	High
	“Tobacco 21” policy	High	Majority	High	Majority	High
	Restricting e-cigarette sales to over the counter sales in pharmacies	Majority	Majority	Low	Majority	Majority
	Allowing tobacco sales in a limited number of specially licenced shops	Majority	Low	Majority	Low	Majority
	Tax increases of 20%+ per year until <5% of the population smoke	Majority	Low	Low	Low	Majority
	Reducing the number of places that can sell tobacco products by 95%	Majority	Low	Majority	Low	Majority
	“Tobacco-Free Generation” policy	Majority	Low	Low	Low	Majority
	Restricting tobacco product sales to restricted hours of the day	Majority	Low	Low	Low	Majority
	Requiring tobacco sales staff to undergo training to provide quitting advice	Low	Low	Majority	Low	Low
	Restricting e-cigarette sales to prescription-only access	Low	Low	Low	Low	Low
	Tobacco user-licence	Low	Low	Low	Low	Low

\*Levels of support are defined as follows: High = ≥70%; Majority = >50% - <70%; Low = 0-50%; \*\*excluding e-cigarettes; \*\*\*currently used both smoked tobacco products and e-cigarettes



**Appendix A: Organogram of Stakeholder Consultations and Communications**



HSE: Health Service Executive, Ireland; TFI: Tobacco-Free Ireland; RCPI: Royal College of Physicians of Ireland; RCSI: Royal College of Surgeons in Ireland; TCD: Trinity College Dublin, Ireland; HIQA: Health Information and Quality Authority, Ireland.

**Appendix B: Survey Instrument**

**Q.1.** Could I ask what age group you fall into?

15-17	1
18-24	2
25-34	3
35-44	4
45-54	5
55-64	6
65+	7

**Q.2.** Are you male or female?

Male	1
Female	2

**Q.3.** What region are you living in?

Dublin	1
Rest of Leinster	2
Munster	3
Connaught/Ulster	4

**Q.4.** To ensure we interview a wide cross-section of the public, could I first ask what the occupation of the chief income earner in your home is? (See glossary for definitions)

Social Grade A/B	1
Social Grade C1	2
Social Grade C2	3
Social Grade D/E	4
Social Grade F	5

**Q.5.** What is the highest level of education you have completed to date?

Completed primary school	1
Currently in secondary school	2
Completed secondary school	3
Currently at third level	4
Completed third level	5
No formal education	6

**Q.6a** Do you smoke tobacco products? For the purposes of this survey, tobacco products do not include e-cigarettes. **READ OUT. SINGLE CODE**

Yes	1
Yes, occasionally	2
No	3
Don't know	4

**Q.6b** Which of the following statements BEST applies to you? **READ OUT. SINGLE CODE**

I have never tried e-cigarettes	1
I have tried e-cigarettes but do not use them anymore	2
I have tried e-cigarettes and use them daily	3
I have tried e-cigarettes and still use them occasionally	4
Don't know	5

**Q.7a** Research shows that 18% of people aged 15 years and older in Ireland smoke. The Government of Ireland has a goal of becoming a tobacco-free country by 2025. This means reducing the proportion of Irish adults who smoke to less than 5%. Were you aware of this goal before now or were you not aware of this goal? **SINGLE CODE**

Yes, aware	1
No, not aware	2

**Q.7b** The 'Tobacco-Free Ireland' goal aims to reduce the proportion of Irish adults who smoke to less than 5% by 2025. Would you say you ..... **READ OUT. SINGLE CODE. FLIP SCALE**

Strongly support this goal	1
Support this goal	2
Are neutral about this goal	3
Oppose this goal	4
Strongly oppose this goal	5
Don't know	6

**Q.7c** Which of the following comes closest to your view - reducing smoking levels to less than 5% **READ OUT. SINGLE CODE. FLIP SCALE**

Is achievable by 2025	1
Is achievable but not until between 2026 and 2035	2
Is achievable but not until between 2036 and 2050	3
Is achievable but not until after 2050	4
Is not achievable at all	5
Don't know	6

**Q.8a** Now I would like to talk about the role the government and the Health Service Executive (HSE) play in achieving Ireland's Tobacco-Free Goal. To what extent do you

agree or disagree with the following? **READ OUT. SINGLE CODE PER STATEMENT.**

**ROTATE STATEMENTS. FLIP SCALE**

<b>Sufficiency of national efforts</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>
The Government should do more to tackle the harm done by smoking	1	2	3	4	5	6
The Government is doing enough to ensure that Ireland's Tobacco-Free goal is achieved	1	2	3	4	5	6
The HSE is doing enough to tackle the harm done by smoking	1	2	3	4	5	6

A: Strongly Agree; B: Somewhat agree; C: Neither Agree nor Disagree; D: Somewhat Disagree; E: Strongly Disagree; F: Don't know

**Q.8b** Moving on, I am going to ask you about a number of potential measures that might help achieve the Tobacco-Free goal. To what extent do you agree or disagree with the following? **READ OUT. SINGLE CODE PER STATEMENT. ROTATE STATEMENTS.**

**FLIP SCALE**

<b>Views on Tobacco Endgame Measures</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>
People should be required to hold an official licence to buy tobacco products	1	2	3	4	5	6
The number of places that can sell tobacco products should be reduced by 95%	1	2	3	4	5	6
Tobacco product sales should only be allowed in a limited number of specially licenced shops and banned from smaller local shops, newsagents, off-licences and petrol stations	1	2	3	4	5	6
Shops that sell tobacco products should be required to display information that encourages tobacco users to quit	1	2	3	4	5	6
People working in shops that sell tobacco products should be required to undergo training to enable them to provide quitting advice to tobacco users	1	2	3	4	5	6
The government should raise the legal age of purchasing tobacco products to 21 years and older	1	2	3	4	5	6
The government should prevent everyone who is currently under 18 from ever buying tobacco products for the rest of their lives	1	2	3	4	5	6
Tobacco product sales should be banned near playgrounds, schools and university campuses	1	2	3	4	5	6
There should be a ban on smoking cigarettes, roll-your-own cigarettes, cigars, and little cigars and cigarillos in public places	1	2	3	4	5	6
Tobacco products should only be sold during restricted hours of the day	1	2	3	4	5	6
The Government should increase the tax on tobacco products by 20% a year until less than 5% of people smoke	1	2	3	4	5	6
Tobacco products should be more tightly regulated	1	2	3	4	5	6
The amount of nicotine in tobacco products should be reduced through new laws to make tobacco products less addictive	1	2	3	4	5	6

Filters on cigarettes and other combustible tobacco products should be banned to make the products more difficult to tolerate	1	2	3	4	5	6
Added chemicals that make cigarettes seem less harsh should be banned to make cigarettes more difficult to tolerate	1	2	3	4	5	6
Individual health warnings should be required to be printed on all individual cigarette sticks	1	2	3	4	5	6

A: Strongly Agree; B: Somewhat agree; C: Neither Agree nor Disagree; D: Somewhat Disagree; E: Strongly Disagree; F: Don't know

**Q.8bi** Which of the following, if any, comes closest to your own view on the sale of tobacco products? **READ OUT. SINGLE CODE. ROTATE. FLIP CODES. INTERVIEWER INSTRUCTION: IF RESPONDENT ASKS, PHASING OUT OF TOBACCO SALES MEANS THE SALE OF TOBACCO PRODUCTS IN IRELAND WOULD BE GRADUALLY DISCONTINUED.**

Tobacco product sales should be phased out	1
Tobacco product sales should be phased out but only if the government provides assistance to help smokers to quit	2
Tobacco product sales should be phased out but only if existing smokers can continue to buy tobacco products using a licence	3
Tobacco product sales should be phased out but only if the government provides assistance to help smokers to quit AND existing smokers can continue to buy tobacco products using a licence	4
Tobacco product sales should not be phased out	5
None of these/other option	6
Don't know	7

**Q.8bii** Over how many years do you think tobacco product sales should be phased out?

\_\_\_\_\_ years  
 Over less than one year ..... 98  
 Don't know ..... 99

**Q.8c** Now I would like to discuss measures which target the tobacco industry. To what extent do you agree or disagree with the following? **READ OUT. SINGLE CODE PER STATEMENT. ROTATE STATEMENTS. FLIP SCALE**

Views on Industry Focused Tobacco-Endgame Measures	A	B	C	D	E	F
Tobacco companies should be required to pay the state for the health costs due to the harm caused by tobacco products	1	2	3	4	5	6
Representatives linked to the tobacco industry should be banned from meeting with government officials	1	2	3	4	5	6

A=Strongly Agree; B=Somewhat agree; C=Neither Agree nor Disagree; D=Somewhat Disagree; E=Strongly Disagree; F=Don't know



**Q.8d** Moving on to regulatory measures for e-cigarettes. To what extent do you agree or disagree with the following? **READ OUT. SINGLE CODE PER STATEMENT. ROTATE STATEMENTS. FLIP SCALE**

<b>Views on E-cigarette Restrictions</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>
E-cigarettes should only be available over the counter through pharmacies	1	2	3	4	5	6
E-cigarettes should only be available by prescription from a doctor	1	2	3	4	5	6
The amount of nicotine in e-cigarettes and/or e-liquid should be limited so they are less addictive	1	2	3	4	5	6

A=Strongly Agree; B=Somewhat agree; C=Neither Agree nor Disagree; D=Somewhat Disagree; E=Strongly Disagree; F=Don't know

#### **Glossary: British National Readership Survey Social Grade Classification System**

<b>Social Grade A</b>	Professional people, very senior managers in business or commerce or top-level civil servants. Retired people and their widows, previously grade A.
<b>Social Grade B</b>	Middle management executives in large organisations with appropriate qualifications. Principal officers in local government and the civil service. Top management or owners of small business, education and service establishments. Retired people, and their widows, previously grade B.
<b>Social Grade C1</b>	Junior management, owners of small establishments, and all others in non-manual positions. Retired people, and their widows, previously grade C1.
<b>Social Grade C2</b>	All skilled manual workers, and those manual workers with responsibility for other people. Retired people, and their widows, previously grade C2, with pensions from their job/late husband's job.
<b>Social Grade D</b>	All semi-skilled and unskilled manual workers, and apprentices and trainees to skilled workers. Retired people, and their widows, previously grade D, with pensions from their job/late husband's job.
<b>Social Grade E</b>	All those entirely dependent on the state long-term, through sickness, unemployment, old age or other reasons. Retired persons who receive only the standard basic state pension. Widows who receive only widows benefit. Those unemployed for a period exceeding six months. Casual or intermittent workers and those without a regular income.
<b>Social Grade F</b>	F1 - Farmers or farm managers of holdings of 50 acres or more and their dependents. F2 - Farmers or farm managers of holdings of less than 50 acres. Farm workers and farm labourers and their dependents.

**Appendix C: Data Dictionary**

No.	Variable	Type of variable	Description	Original Coding	Recoding
1.	Age (years)	Categorical	Age group of participant	1=15-17, 2=18-24, 3=25-34, 4=35-44, 5=45-54, 6=55-64, 7=65+	1=15-24 (1,2), 2=25-44 (3,4), 3=45-64 (5,6), 4=65+ (7)
2.	Sex	Categorical	Sex of participant	1=Male, 2=Female	0=Female (2), 1=Male (1)
3.	Region	Categorical	Region where participant resides	1=Dublin, 2=Rest of Leinster, 3=Munster, 4=Connaught/Ulster	0=Leinster (1,2), 1=Munster (3), 2=Connaught/Ulster (4)
4.	Social grade	Categorical	Social grade of participant	1=AB, 2=C1, 3=C2, 4=DE, 5=F	0=Higher (1,2), 1=Lower (3,4), 2=Farmer (5)
5.	Educational attainment	Categorical	Highest level of education attained	1=Completed primary school, 2=Currently in secondary school, 3=Completed secondary school, 4=Currently at third level, 5=Completed third level, 6=No formal education	0=Higher (5), 1=Lower (1-4,6)
6.	Current smoking status	Categorical	Whether participant currently smokes tobacco products excluding e-cigarettes	1=Yes, smokes tobacco products, 2=Yes, smokes tobacco products occasionally, 3=No, 4=Don't know	0=Does not smoke tobacco products (3), 1=Smokes tobacco products (1,2), Missing=Don't know (4)
7.	Current E-cigarette use status	Categorical	Whether participant currently uses e-cigarettes	1=I have never tried e-cigarettes, 2=I have tried e-cigarettes but do not use them anymore, 3=I have tried e-cigarettes and use them daily, 4=I have tried e-cigarettes and use them occasionally, 5=Don't know	0=No current e-cigarette use (1,2), 1=Current e-cigarette use (3,4), Missing=Don't know (5)
8.	Current tobacco product use status	Categorical	Whether participant currently uses tobacco products or e-cigarettes or both	Composite variable derived from variables 6. And 7.	0=No current tobacco product or e-cigarette use, 1=Exclusive tobacco product use, 2=Exclusive e-cigarette use, 3=Dual tobacco product and e-cigarette use, Missing=Don't know
9.	TFI goal awareness	Categorical	Whether participant is aware of TFI goal	1=Yes, aware, 2=No, not aware	0=Not aware (2), 1=Aware (1)
10.	TFI goal support	Categorical	Whether participant supports the TFI goal	1=Strongly agree, 2=Somewhat agree, 3=Neither agree nor disagree, 4=Somewhat disagree, 5=Strongly disagree, 6=Don't know	0=No support (3,4,5,6), 1=Support (1,2)
11.	TFI goal perceived achievability	Categorical	Whether participant believes the TFI goal is achievable	1=Is achievable by 2025, 2=Is achievable but not until between 2026 and 2035, 3=Is achievable but not until between 2036 and 2050, 4=Is achievable but not until after 2050, 5=Is not achievable at all, 6=Don't know	0=Not achievable/Don't know (5,6), 1=Achievable (1,2,3,4)

**Appendix C: Data Dictionary (Continued)**

No.	Variable	Type of variable	Description	Original Coding	Recoding
12.	TFI goal achievability timeframe	Categorical	Timeframe by which participant believes the TFI goal is achievable	As above	1=Is achievable by 2025, 2=Is achievable but beyond 2025, 3=Is not achievable/Don't know
13.	View on government action on smoking-related harm	Categorical	Whether participant agreed government should do more to tackle smoking-related harm	1=Strongly agree, 2=Somewhat agree, 3=Neither agree nor disagree, 4=Somewhat disagree, 5=Strongly disagree, 6=Don't know	0=Do not agree/Don't know (3,4,5,6), 1=Agree (1,2)
14.	View on HSE action on smoking-related harm	Categorical	Whether participant agreed the HSE is doing enough to tackle smoking-related harm	1=Strongly agree, 2=Somewhat agree, 3=Neither agree nor disagree, 4=Somewhat disagree, 5=Strongly disagree, 6=Don't know	0=Do not agree/Don't know (3,4,5,6), 1=Agree (1,2)
15.	View on government commitment to TFI goal	Categorical	Whether participant agreed Government is doing enough to ensure TFI is achieved	1=Strongly agree, 2=Somewhat agree, 3=Neither agree nor disagree, 4=Somewhat disagree, 5=Strongly disagree, 6=Don't know	0=Do not agree/Don't know (3,4,5,6), 1=Agree (1,2)
16.- 37.	Support for 21 component endgame measures (as outlined in Appendix F)	Categorical	Whether participant supported proposed endgame measures	1=Strongly agree, 2=Somewhat agree, 3=Neither agree nor disagree, 4=Somewhat disagree, 5=Strongly disagree, 6=Don't know	0=No Support (3,4,5,6), 1=Support (1,2)
38.	Support for a tobacco sales phase-out	Categorical	Whether participants supported a tobacco sales phase-out	1=Support with no conditions, 2=Support if the government provides assistance to help smokers to quit, 3=Support but only if existing smokers can continue to buy tobacco products using a licence, 4=Support but only if conditions in both 2. and 3. are met, 5=Does not support, 6=Don't know	0=No support(5,6), 1=Support (1,2,3,4)
39.	Acceptable phase-out timeline	Categorical	Timeframe within which participants supported a tobacco sales phase-out	Enter as given, 11=11 years or longer, 12=less than 1 year, 13=Don't know	1=0-5 years, 2=6-10 years, 3=>10 years, 4=Don't know

## Appendix D: Supplementary Tables

**Supplementary Table 1: Participant Characteristics (N=1,000)**

Variable	Valid Denominator	Total		Comparative Population Estimate
		N	%	
<b>Sex</b>	1,000			
Male		491	49.1	48.8 <sup>a</sup>
Female		509	50.9	51.2 <sup>a</sup>
<b>Age (years)</b>	1,000			
15-24		159	15.9	15.8 <sup>b</sup>
25-44		347	34.7	34.5 <sup>b</sup>
45-54		311	31.1	31.2 <sup>b</sup>
65+		183	18.3	18.5 <sup>b</sup>
<b>Region</b>	1,000			
Leinster		558	55.8	55.3 <sup>c</sup>
Munster		267	26.7	26.9 <sup>c</sup>
Connaught/Ulster		175	17.5	17.8 <sup>c</sup>
<b>Social grade</b>	1,000			
Higher (A,B,C1)		435	43.5	43.5 <sup>d</sup>
Lower (C2,D,E)		505	50.5	50.5 <sup>d</sup>
Farmer (F)		60	6.0	6.0 <sup>d</sup>
<b>Educational attainment**</b>	1,000			
Higher		544	54.4	53.0 <sup>e</sup>
Lower		456	45.6	47.0 <sup>e</sup>
<b>Current tobacco product use status***</b>	994			
Exclusive tobacco product use		110	11.0	16.9 <sup>f</sup>
Exclusive e-cigarette use		57	5.7	2.9 <sup>f</sup>
Dual use		25	2.6	1.1 <sup>f</sup>
Non-use		802	80.7	79.1 <sup>f</sup>

\*Estimates for general adult population ≥15 years presented as available from sources; \*\*Higher: had completed third level education, lower: had not completed third level education; \*\*\* Tobacco product use: currently used smoked tobacco products but not e-cigarettes; E-cigarette use: currently used e-cigarettes but not smoked tobacco products; Dual use: currently used both smoked tobacco products and e-cigarettes; Non-use: did not currently use tobacco products or e-cigarettes; **a:** Census, 2022; **b:** Census, 2016; **c:** Census, 2016; **d:** Association of Irish Market Research Associations Estimates May 2020; **e:** Labour Force Survey, 2021 (pertains to persons aged 25-64 only); **f:** Healthy Ireland Survey, 2021.

**Population Estimates: Sources**

- a. Central Statistics Office. Press Statement Census of Population 2022 - Preliminary Results. Dublin: CSO, 2022. Available: <https://www.cso.ie/en/csolatestnews/pressreleases/2022pressreleases/presstatemencensusofpopulation2022-preliminaryresults/> [Accessed 16 Nov 2022].
- b. Central Statistics Office. Census of Population 2016 - Profile 3 An Age Profile of Ireland CSO: Dublin, 2022. Available: <https://www.cso.ie/en/releasesandpublications/ep/p-cp3oy/cp3/assr/> [Accessed 16 Nov 2022].
- c. Central Statistics Office. Statistical Yearbook of Ireland 2016; Census Dublin: CSO, 2022. Available: <https://www.cso.ie/en/releasesandpublications/ep/p-syi/psyi2016/people/cen/> [Accessed 16 Nov 2022].
- d. Sourced from IPSOS MRBI
- e. Central Statistics Office. Educational Attainment Thematic Report 2021 Dublin: CSO, 2021.
- f. Department of Health in Ireland. Healthy Ireland Summary Report 2021. Dublin: Health Service Executive, 2021.

**Supplementary Table 2: Multiple Logistic Regression Modelling Analysis of Participant Characteristics and TFI Goal Support (N=995)**

Characteristic	Unadjusted OR (95% CI)	Adjusted OR (95% CI)	P-value
<b>Sex</b>			
Male	1	1	
Female	<b>1.76 (1.31-2.35)</b>	<b>1.47 (1.05-2.07)</b>	<b>0.025</b>
<b>Age (years)</b>			
15-24	1.05 (0.64-1.71)	1.60 (0.89-2.89)	0.117
25-34	1	1	
35-44	1.13 (0.71-1.82)	1.29 (0.74-2.24)	0.364
45-54	1.17 (0.72-1.92)	1.29 (0.72-2.29)	0.395
55-64	1.09 (0.65-1.82)	1.64 (0.89-3.03)	0.117
≥65	<b>1.72 (1.03-2.86)</b>	<b>3.70 (1.95-7.00)</b>	<b>&lt;0.001</b>
<b>Region</b>			
Leinster	1	1	
Munster	1.08 (0.77-1.52)	0.96 (0.64-1.43)	0.825
Connaught/Ulster	1.02 (0.69-1.50)	0.88 (0.56-1.37)	0.563
<b>Social grade</b>			
Lower (C2,D,E)	1	1	
Higher (A,B,C1)	<b>1.94 (1.43-2.62)</b>	<b>1.47 (1.00-2.15)</b>	<b>0.049</b>
Farmer	<b>4.36 (1.83-10.42)</b>	<b>4.06 (1.45-11.35)</b>	<b>0.008</b>
<b>Educational attainment*</b>			
Lower	1	1	
Higher	<b>1.73 (1.30-2.30)</b>	<b>1.80 (1.21-2.66)</b>	<b>0.004</b>
<b>Current tobacco product use status**</b>			
Exclusive tobacco product use	1	1	
Exclusive e-cigarette use	0.90 (0.47-1.71)	1.08 (0.52-2.24)	0.833
Dual use	1.03 (0.43-2.45)	0.89 (0.34-2.28)	0.803
Non-use	<b>3.13 (2.07-4.73)</b>	<b>2.67 (1.66-4.30)</b>	<b>&lt;0.001</b>
<b>Prior awareness of the TFI goal</b>			
Unaware	1	1	
Aware	1.11 (0.82-1.50)	1.00 (0.70-1.44)	0.992
<b>Believed TFI goal was achievable</b>			
No/Unsure	1	1	
Yes	<b>4.03 (2.95-5.53)</b>	<b>5.04 (3.38-7.52)</b>	<b>&lt;0.001</b>

\*Higher: had completed third level education, lower: had not completed third level education; \*\*

Tobacco product use: currently used smoked tobacco products but not e-cigarettes; E-cigarette use: currently used e-cigarettes but not smoked tobacco products; Dual use: currently used both smoked tobacco products and e-cigarettes; Non-use: did not currently use tobacco products or e-cigarettes; OR: odds ratio; CI: Confidence interval; Nagelkerke  $r^2 = 0.233$ ; Percentage Accuracy in Classification = 79.4%; Bold font indicates  $p < 0.05$ ; Adjusted for sex, age, region, social grade, tobacco product use, prior TFI goal awareness and perceived achievability of the TFI goal.

**Appendix E: Summary of Public Support Levels for Tobacco Endgame Measures**

Category	Tobacco Endgame Measure	Support*				
		Total sample	Tobacco product use**	E-cigarette use	Dual use***	Non-use
Product-Focused	Lowering the nicotine content in tobacco products	High	High	High	Majority	High
	Lowering the nicotine content in e-cigarettes	High	High	High	Majority	High
	Tighter regulation of tobacco products	High	Majority	High	Majority	High
	Ban on added chemicals that make cigarettes seem less harsh	Majority	Majority	Majority	Majority	High
	Requiring individual health warnings on all individual cigarette sticks	Majority	Low	Majority	Majority	Majority
	Banning filters on cigarettes and other combustible tobacco products	Majority	Low	Low	Low	Majority
Institutional Structure-Focused	Requiring tobacco companies to pay for tobacco-related health costs due to tobacco-related harm	High	Majority	Majority	Low	High
	Banning tobacco industry representatives meeting with government	Majority	Low	Low	Low	Majority
User-Focused	Ban on smoking tobacco products in public places	Majority	Low	Low	Majority	High
Supply-Focused	Complete phase-out of tobacco product sales	High	Majority	High	High	High
	Requiring tobacco retailers to display information encouraging users to quit	High	Majority	High	High	High
	Banning tobacco product sales near playgrounds, schools and universities	High	Majority	High	Majority	High
	“Tobacco 21” policy	High	Majority	High	Majority	High
	Restricting e-cigarette sales to over the counter sales in pharmacies	Majority	Majority	Low	Majority	Majority
	Allowing tobacco sales in a limited number of specially licenced shops	Majority	Low	Majority	Low	Majority
	Tax increases of 20%+ per year until <5% of the population smoke	Majority	Low	Low	Low	Majority
	Reducing the number of places that can sell tobacco products by 95%	Majority	Low	Majority	Low	Majority
	“Tobacco-Free Generation” policy	Majority	Low	Low	Low	Majority
	Restricting tobacco product sales to restricted hours of the day	Majority	Low	Low	Low	Majority
	Requiring tobacco sales staff to undergo training to provide quitting advice	Low	Low	Majority	Low	Low
	Restricting e-cigarette sales to prescription-only access	Low	Low	Low	Low	Low
	Tobacco user-licence	Low	Low	Low	Low	Low

\*Levels of support are defined as follows: High = ≥70%; Majority = >50% - <70%; Low = 0-50%; \*\*excluding e-cigarettes; \*\*\*currently used both smoked tobacco products and e-cigarettes