

Online-Annex A: Methods used to collect NRQ data in each study center

MPh: mobile phone; NRQ: Non-response questionnaire

<i>Study Center</i>	<i>Method of administering NRQ</i>	<i>Mobile phone use questions included</i>	<i>Other questions included</i>
Australia	By telephone after refusal or other reason for non-participation was recorded. Controls who had no telephone number were visited in-person; cases were only contacted by phone.	<ul style="list-style-type: none"> • Regular MPh use • Start year / Stop year • Total duration of use 	
Canada Montreal	By telephone after refusal. No attempt was made to administer the NRQ to subjects who refused by mail.	<ul style="list-style-type: none"> • Regular MPh use • Start year / Stop year • Current use 	
Canada Vancouver	By telephone after refusal or other reason for non-participation was recorded.	<ul style="list-style-type: none"> • Regular MPh use • Start year / Stop year 	<ul style="list-style-type: none"> • Education
Finland	By telephone after refusal or other reason for non-participation was recorded.	<ul style="list-style-type: none"> • Regular MPh use • Start year / Stop year 	<ul style="list-style-type: none"> • Education
France	By telephone after refusal for controls. NRQ was filled in by the interviewers when contacting cases by phone or in-person.	<ul style="list-style-type: none"> • Use of MPh 	<ul style="list-style-type: none"> • Occupation • Education
Germany	Postal consent form included NRQ; telephone contact was made with those who did not return the consent form. Cases approached in hospital were asked NRQ in-person; others were sent same postal consent form as controls. Subjects who refused participation could not be recontacted.	<ul style="list-style-type: none"> • Regular MPh use^a • Start year 	
Israel	By telephone after refusal or other reason for non-participation was recorded. Persons who had no telephone number were visited in-person.	<ul style="list-style-type: none"> • Regular MPh use • Start year / Stop year 	<ul style="list-style-type: none"> • Education • Occupational exposures • Family history
Italy	By telephone after refusal or other reason for non-participation was recorded. Persons who had no telephone number were visited in-person.	<ul style="list-style-type: none"> • Regular MPh use • Start year / Stop year 	<ul style="list-style-type: none"> • Occupation, occupational exposures, use of ham radios and walkie-talkies • Education
Japan	By telephone or postal questionnaire	<ul style="list-style-type: none"> • Regular MPh use 	

Continued

^a Exact definition of regular use not included on consent form due to space restrictions

<i>Study Center</i>	<i>Method of administering NRQ</i>	<i>Mobile phone use questions included</i>	<i>Other questions included</i>
New Zealand	By telephone after refusal or other reason for non-participation was recorded.	<ul style="list-style-type: none"> • Regular MPh use 	
Norway	By telephone after refusal or other reason for non-participation was recorded.	<ul style="list-style-type: none"> • Regular MPh use • Frequency of use • Start year • Current use 	<ul style="list-style-type: none"> • Education
Sweden	By telephone after refusal or other reason for non-participation was recorded. Persons who could not be reached by telephone were sent a more extensive postal questionnaire with questions from the full interview.	<ul style="list-style-type: none"> • Ever MPh use • Regular MPh use • Start year / Stop year • Further MPh questions from full interview^a 	<ul style="list-style-type: none"> • Education • Marital status

^a Included in the postal questionnaire only

Online-Annex B: Hypothetical scenarios of regular mobile phone use among non-participants in the study, as a function of observed use patterns in interviewed subjects and NRQ respondents – Meningioma Study

Legend

- P₁: Mobile phone use prevalence among interviewed subjects
- P₂: Mobile phone use prevalence among refusers who responded to the NRQ; $P_2=0.82 \cdot P_1$: NRQ result for all cases and controls combined. The P_2/P_1 ratio was assumed to be the same for controls and cases and for different study centers, sex and age categories as the NRQ results did not indicate substantial or consistent differences between these groups. Data analysed from study centres with NRQ data was applied to all centres.
- P₃: Mobile phone use prevalence among refusers who did not respond to the NRQ.
- P₄: Mobile phone use prevalence among subjects who did not participate for other reason than refusal (dead/too ill, MD refusal, untraceable, other).
- W₁-W₄: Fraction of total number of subjects ascertained in each response category for all study centers combined (from Table 3 in main article).
- S₁: Probability of selection (i.e. participation in full interview) among mobile phone users = $(W_1 * P_1) / P_{1-4}$
- S₀: Probability of selection (i.e. participation in full interview) among non-mobile phone users = $(W_1 * (1-P_1)) / (1-P_{1-4})$
- m_w: Weighted mean.

Scenarios	Observed % phone use		Assumed % phone use (basis for assumption)		Assumed % phone use in target population	Selection probability		
	Interviewed	Refusal with NRQ	Refusal without NRQ	Other non-participants		P ₁₋₄	S ₁	S ₀
	P ₁	P ₂	P ₃	P ₄				
<i>Controls</i>								
	<i>Fraction of subjects in each category W₁-W₄</i>							
	0.55	0.17 ^a	0.13	0.15	1.00			
R	Reference ^b	64%	64% (P ₁)	64% (P ₁)	64% (P ₁)	64%	0.55	0.55
A	NRQ applies to refusers with NRQ, unbiased use in other non-participants	64%	52%	61% (m _w (P ₁₋₂))	61% (m _w (P ₁₋₂))	61%	0.58	0.51
B	NRQ applies to all refusers, unbiased use in other non-participants	64%	52%	52% (P ₂)	60% (m _w (P ₁₋₃))	60%	0.59	0.50
C	NRQ applies to refusers with NRQ, less use ^c in other non-participants	64%	52%	43% (0.67*P ₁)	43% (0.67*P ₁)	56%	0.63	0.45
D	NRQ applies to refusers with NRQ, more use ^d in other non-participants	64%	52%	77% (1.2*P ₁)	77% (1.2*P ₁)	66%	0.53	0.58
E	NRQ applies to all non-participants	64%	52%	52% (P ₂)	52% (P ₂)	59%	0.60	0.48
<i>Meningioma cases</i>								
	<i>Fraction of subjects in each category W₁-W₄</i>							
	0.78	0.05	0.07	0.11	1.00			
r	Reference ^d	58%	58% (P ₁)	58% (P ₁)	58% (P ₁)	58%	0.78	0.78
a	NRQ applies to refusers with NRQ, unbiased use in other non-participants	58%	47%	57% (m _w (P ₁₋₂))	57% (m _w (P ₁₋₂))	57%	0.79	0.76
b	NRQ applies to all refusers, unbiased use in other non-participants	58%	47%	47% (P ₂)	57% (m _w (P ₁₋₃))	57%	0.79	0.76
c	NRQ applies to refusers with NRQ, less use in other non-participants	58%	47%	39% (0.67*P ₁)	39% (0.67*P ₁)	54%	0.84	0.71
d	NRQ applies to refusers with NRQ, more use in other non-participants	58%	47%	70% (1.2*P ₁)	70% (1.2*P ₁)	60%	0.75	0.82
e	NRQ applies to all non-participants	58%	47%	47% (P ₂)	47% (P ₂)	55%	0.81	0.74

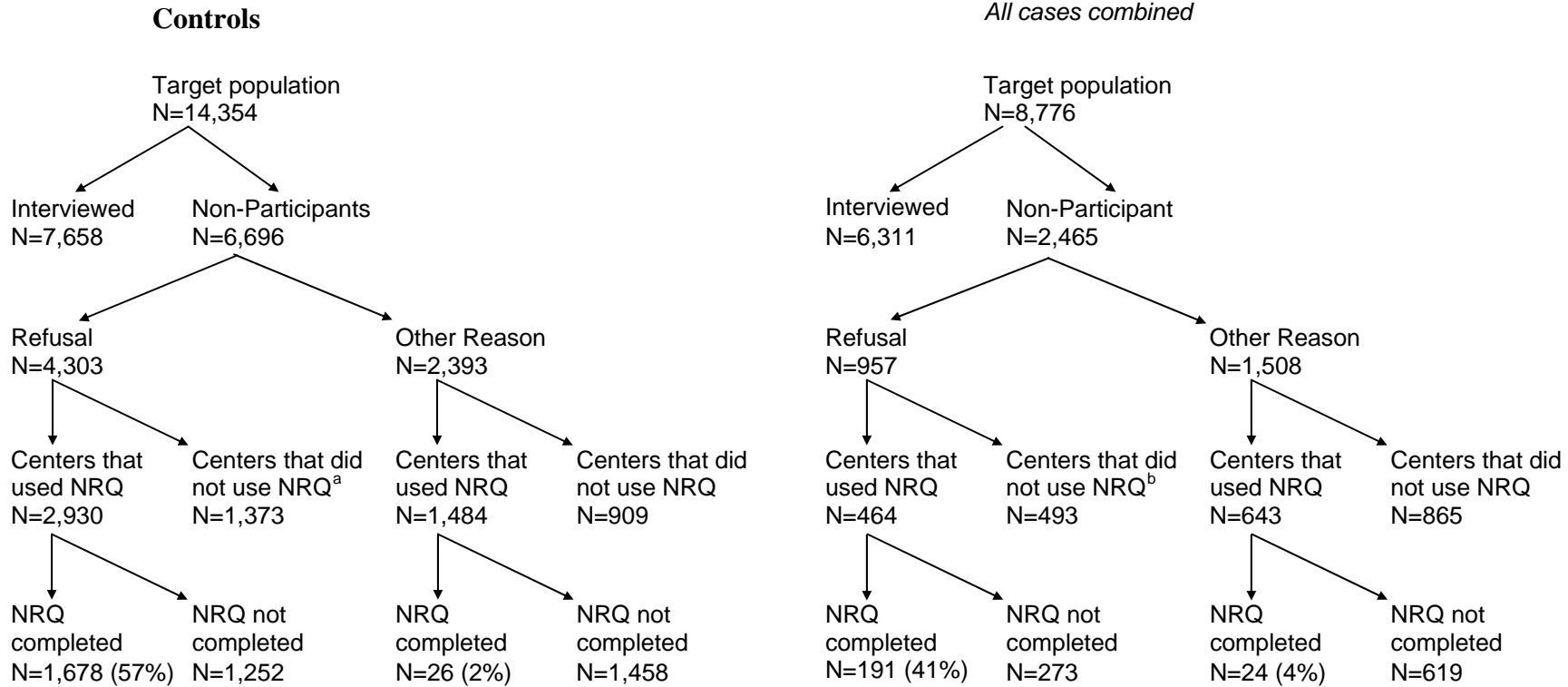
^a Based on fraction of NRQ completion for refusers in study centers that used NRQ (Online Annex C: 57% in controls, 41% in cases)

^b “Reference” scenario: phone use for all non-participants (P₂₋₄) is the same and equal to that for the interviewed subjects (P₁).

^c Less use: P₃₋₄ was assumed to be 33 percent lower than of P₁, based on a Finnish comparison of percentage listed phone numbers held by interviewed subjects and non-participants (21).

^d More use: P₃₋₄ was assumed to be 20 percent higher than P₁; there are no existing data on which to base this scenario.

Online-Annex C: Completion of the non-response questionnaires (NRQ)



^a Canada-Ottawa, Denmark, UK-North, UK-South

^b Canada-Ottawa, Canada-Vancouver, Denmark, Japan, New-Zealand, UK-North, UK-South