### Additional File 2. Summary of variables

| VARIABLES          | CATEGORIES                                                                 |
|--------------------|-----------------------------------------------------------------------------|
| Age                | 50-60                                                                        |
|                    | 61-71                                                                        |
| Sex                | Man                                                                          |
|                    | Woman                                                                        |
| Smoking            | Smoker: if affirmative information was registered in the medical records during the last four years Non-smoker |
| Diabetes mellitus  | Diabetic: Code 250 (CIE-10) before invitation Non-diabetic                   |
| Arterial hypertension | Hypertensive: Code 401-404 (CIE-10) before invitation Non-hypertensive.    |
| Obesity            | Obese: BMI ≥30 in the last two years Non-obese.                              |

*Among diabetics, it was considered controlled if they had HbA1c ≤ 7.6% in the last measure over eight months before invitation.*

*Among hypertensives, it was considered controlled if they had SBP ≤ 140 mmHg or DBP ≤ 90 mmHg in the last three measurements over the last two years.*

*Among the obese, it was considered controlled if they had two or more BMI measurements over the last two years.*
| Use of the health services (visits to the GP and/or nurse) | ≤6 | 7-15 | 16-28 | ≥29 |
|----------------------------------------------------------|----|------|-------|-----|
| Influenza vaccines (only for people ≥65 years old during the last two years) | Vaccinated | Non-vaccinated |
| Comorbidity index | Very low | Low | Moderate | Severe |
| Deprivation index | Very low | Low | Moderate | High | Very high |
| Type of participant | Regular participant: participation in the last invitation and in the previous one or more Non-participant: never participated Irregular participant: participation in the last invitation, although not in the previous one or the other way round. | | | | |
Initial participant (PIN): participation in first invitation in the studied period

Successive participant (PIS): initial participation in second or subsequent invitations