Demographics of patients shielding from COVID in Grampian

**Population**

The population of shielding people used for this analysis was supplied by Nicola Beech from Health Intelligence in NHS Grampian to the Grampian Data Safe Haven on 12th October 2020.

This shielding list includes all people instructed to shield who live in the NHS Grampian Region. NHS Grampian covers three local authorities: Aberdeen City, Aberdeenshire and Moray. The total population is 585,700.

People could be included in the shielding list either by being added at the national level or locally.

**Method used for national searches**

Described here <https://www.hps.scot.nhs.uk/web-resources-container/covid-19-search-criteria-for-highest-risk-patients-for-shielding>

**Methods used for local searches**

Searches could be carried out by GPs and hospital consultants using any of the databases VISION, EMIS, TrakCare, and datasets held in departments. An overview of how local additions and removals were implemented is provided in “Shielding\_Information\_Flow\_04052020.pdf”.

**Population Exclusions**  
For this analysis, people on the original shielding list were excluded from the study population for the following reasons:

Incorrectly put on the shielding list (primarily due to a batch that included false positive lung cancer results)

Moved from Scotland

Died before shielding began on 26th March 2020

Added to the shielding list after 31st July 2020

**Reasons to shield**

The list of reasons for shielding and how they were determined in the national searches are given in the methods document linked above. People could have multiple reasons to shield. For patients added locally, the reasons to shield was stated by the GP or consultant rather than derived from the patients’ electronic health care record.

**Source of shielding directive**

For every reason to shield, the source was given as either from the national search or the local search. If a patient had any reason to shield with a national source they have been categorised as shielding from the national directive. Only if all sources were local are they categorised as shielding from a local directive.

**Age**

For data protection reasons date-of-birth is given by month and year only. Age was calculated as of 1st March 2020, assuming date-of-birth on the first of the month given.

**Deprivation**

Measures of patients’ home area deprivation were taken from the Scottish Government’s Scottish Index of Multiple Deprivation measure for 2020 (version 2). Nota bene: SIMD quintile 1 is the most deprived, and SIMD quintile 5 is the least deprived. <https://www.gov.scot/collections/scottish-index-of-multiple-deprivation-2020/>

**Urban-Rural**

The measure of urbanity of the patients’ home area was taken from the Scottish Government’s Urban Rural Classification 2016. <https://www.gov.scot/publications/scottish-government-urban-rural-classification-2016/pages/2/>

**Disclosure Control**

For the interactions of shielding reason + age and shielding reason + deprivation, people in the shielding category of “pregnant with a heart condition” have been combined with the “other” category due to small numbers.

**Analytic Code**

The R code used to generate the tables given in “ndl\_output\_1.xlsx” is given in the RMarkdown document “ndl\_output\_1.Rmd”.