

Corrigendum: Impact of frailty in older people on health care demand: simulation modelling of population dynamics to inform service planning

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Corrigendum issued December 2024 Corrigendum DOI: 10.3310/NBCX8229 DOI: 10.3310/LKJF3976

This report should be referenced as follows:

Walsh B, Fogg C, England T, Brailsford S, Roderick P, Harris S, et al. Impact of frailty in older people on health care demand: simulation modelling of population dynamics to inform service planning. Health Soc Care Deliv Res 2024;12(44). Corrigendum to Health Soc Care Deliv Res 2024;12(44):140

Corrigendum notice

Impact of frailty in older people on health care demand: simulation modelling of population dynamics to inform service planning

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This paper¹ is corrected as follows:

Equation cross references corrected:

Equation 2 updated to Equation 4

Equation 3 updated to Equation 5

Equation 4 updated to Equation 6

Equation 5 updated to Equation 7

Equation 6 updated to Equation 8

Equation 8 updated from deaths in population_j = population_j * population that deregister to deregistrations_j = population_i * proportion that deregister

Reference

1. Walsh B, Fogg C, England T, Brailsford S, Roderick P, Harris S, *et al.* Impact of frailty in older people on health care demand: simulation modelling of population dynamics to inform service planning. *Health Soc Care Deliv Res* 2024;**12**(44). https://doi.org/10.3310/LKJF3976

TABLE 46 Description of the variables in Equation 3

Variable	Description
entryflow _j	Number of patients that join an age/frailty subgroup in the population
frailty transition flow $_{j-1 to j}$	Number of patients who have moved from a lower frailty category in the previous month to their current frailty score, e.g. from Fit to Mild
$frailty transition flow_{j to j+1}$	Number of patients who during the month have moved into the next frailty category, e.g. from Mild to Moderate
ageing flow _j	Number of patients that move from the current age band into the next age band, e.g. those that were in the 65–74 group turn 75
ageing flow $_{j-1}$	Number of patients who have aged during the month, e.g. those that have recently turned 65 and were previously in the 50–64 age band
deaths _j	Number of patients in a population subgroup that die during the month
deregistrations _j	Number of patients that have deregistered from a RCGP RSC GP practice/are lost to follow-up in the month

The expressions for the entry flow are typically of the form given in Equation 4 where a, b, c and d are constants.

$$entry into population_{j} = \frac{(a + btime + ctime^{2} + dtime^{3})}{12}$$
(4)

The expressions for the frailty transition flows are typically of the form given in Equation 5 where a, b, c and d are constants.

$$fratility transition flow_{j-1 \text{ to } j} = population_j + \frac{(a + b \text{ time} + c \text{ time}^2 + d \text{ time}^3)}{12}$$
(5)

The expressions for the ageing flows are typically of the form given in Equation 6 where a, b, c, d and e are constants.

$$ageing flow_{j} = population_{j} * \frac{(a + btime + ctime^{2} - dtime^{3} + etime^{4})}{12}$$
(6)

(7)

The expressions for the exit flows due to death are typically of the form given in Equation 7.

deaths in population_j = population_j
$$*$$
 proportion that die

The expressions for the exit flows due to deregistration are typically of the form given in Equation 8.

deregistrations_i = popultion_i * proportion that deregister (8)