

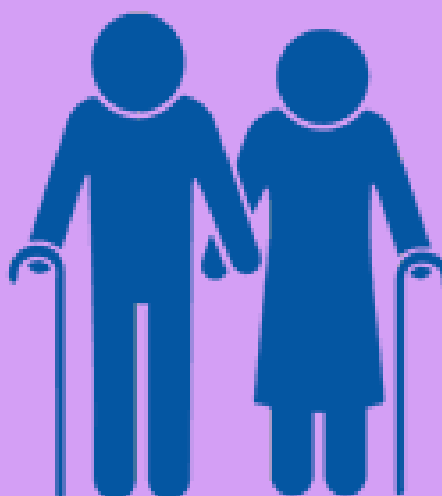
# EPOSA FACT

## Relationship between osteoarthritis and frailty in older adults

### Frailty

Frailty is a physiological state characterized by the deregulation of multiple physiologic systems with aging. The loss of homeostatic capacity exposes older adults to disability, diseases, and finally death. A frail person can be identified when three of the following five markers are present: low physical activity, global weakness with low muscle strength, exhaustion, overall slowness, and loss of weight. Pre-frailty occurs at an earlier stage of the development of frailty and is identified when two of the above markers are present.

In EPOSA, we examined the association between osteoarthritis (OA) and prefrailty/frailty across Europe in an older population.



### Prevalence rates of (pre-)frailty

Frailty was present in 10.2% of the population, ranging across countries from a prevalence rate of 5.6% in Germany and Sweden to 15.4% in the UK. The overall prevalence rate of pre-frailty was 51.0%. The prevalence of both frailty and pre-frailty were higher in women and increased with age in both sexes, with frailty reaching 26.1% in women aged 80 and over.

### Odds of (pre-)frailty

The odds of frailty and pre-frailty are 2.96 and 1.54 as high in older adults with OA as in those without OA.

These associations remain when OA of the knee, hip, and hand joints are considered separately, and is stronger in those with increasing number of joints involved.

	PRE-FRAILTY	FRAILTY
CLINICAL OA AT ANY SITE <sup>b</sup>	1.54 [1.24-1.91]	2.96 [2.11-4.16]
KNEE OA <sup>c</sup>	1.43 [1.04-1.98]	2.08 [1.25-3.46]
HIP OA <sup>c</sup>	1.95 [0.86-4.42]	4.41 [1.41-13.82]
HAND OA <sup>c</sup>	1.50 [1.06-2.12]	2.57 [1.46-4.55]
CLINICAL OA-NUMBER OF SITES		
OA 1 SITE <sup>b</sup>	1.45 [1.14-1.85]	2.47 [1.68-3.63]
OA 2 SITES <sup>b</sup>	1.73 [1.16-2.57]	4.18 [2.42-7.22]
OA 3 SITES <sup>b</sup>	2.26 [1.28-8.32]	8.95 [2.83-28.39]