capacity (FVC) < 0.70 and they were clinically stable (i.e., stable shortness of breath and sputum production). We report baseline data recorded before any specific interventions were undertaken. Centres from The Netherlands and UK also provided data on 66 healthy control subjects that were matched for age, gender, and BMI with a subgroup of 66 COPD patients. On the basis of a 1:1 multivariate matching, the closest possible *case:control* matches were determined. Subjects matched exactly for age and gender, the median error between BMI values of matching subjects was 0.58 [0.29–1.2] *Kg/m²*. Subject group characteristics are presented in Table XIV. The data collection was approved by ethics committees at each of the participating centres, according to local regulations. Written informed consent was provided by all participants.

Table XIV Subject group characteristics.

	All COPD*	Matching healthy	Matching COPD**
	n = 1059	n = 66	n = 66
Male/Female (n)	689/370	30/36	30/36
Age (years)	66 [61–72]	65 [61–70]	65 [61–70]
BMI (Kg/m2)	25.9 [22.5–29.6]	25.2 [23–27.3]	25 [22.5–27.8]
FEV1 (% predicted)	49 [34–64]	107 [97–117]	42 [29–63]
GOLD 1–2–3–4 (n)	93–419–354–193	-	8–16–23–19
MMRC 0-1-2-3-4 (n)	145-279-228-195-67	44-1-0-1-0	6-15-18-15-5
Assessed nights (n)	6446	404	411
Weekdays (%)	67.3	69	65
Nights per subject	6 [6–6]	6 [6–6]	6 [6–6]

Data are summarized as absolute frequency (n), relative frequency (%), or median and quartiles [Q1–Q3]. *MMRC data for 914 subjects. **MMRC data for 59 subjects.

7.4.2 Data recordings

Study participants wore the SenseWear Armband or SenseWear Mini Armband activity monitors [140] (BodyMedia Inc., Pittsburgh, PA, USA) on the upper arm both during daytime and night-time so that continuous, real-life data were recorded in a natural environment. These devices included an accelerometer with different physiological sensors: a heat flux sensor, a galvanic skin response (GSR) sensor, a skin temperature (ST) sensor, and a near-body ambient temperature sensor [68, 44]. Data were sampled at one minute intervals and, together with demographic characteristics, were used to estimate METs using proprietary algorithms developed by the manufacturer. The use of multisensory data in combination with pattern