Management of obesity in primary care

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Overview

- Return to normal weight in obesity

- BMI monitoring in primary care

- Access to weight management interventions

- Effectiveness of primary care interventions

- Where next?

KCL obesity projects

- Costs & outcomes of increasing access to bariatric surgery for obesity: cohort study & cost-effectiveness analysis using electronic health records
- An epidemiological study of obesity using primary care electronic health records

Clinical Practice Research Datalink
- Largest primary care database in the World
- Anonymised longitudinal data
- 80 million person-years from 1990 onwards
- Linkage to HES data, socioeconomic deprivation

What is the probability of an obese person returning to normal weight?

## What is the probability of an obese person returning to normal weight?

- Patients registered in CPRD between 2004 & 2014
- Aged ≥20 years, & 3 or more BMI records
- Stratified selection from BMI categories
- Exclude patients who underwent bariatric surgery
- N= ~300,000

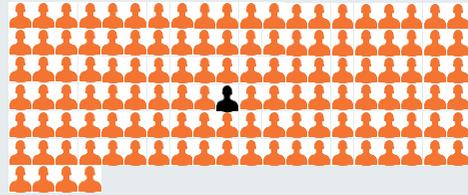Used time-to-event analysis to assess:
- Change to a different BMI category
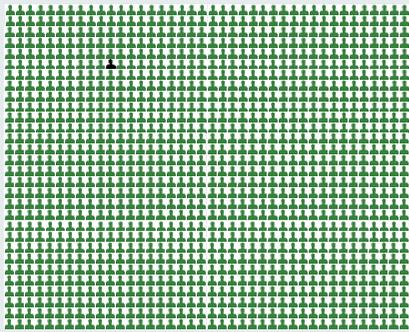- Loss of 5% body weight

Converted rates to probabilities

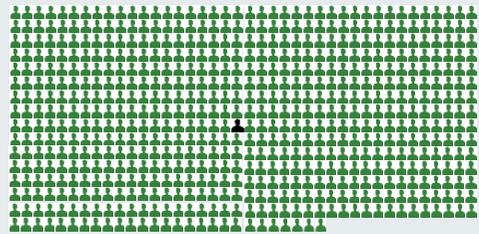### Annual probability of an obese man achieving normal weight
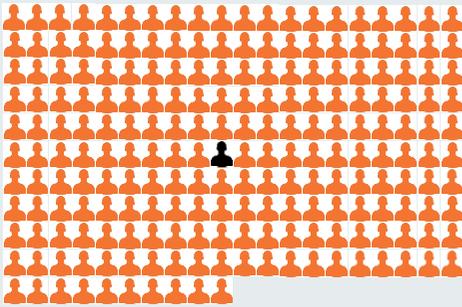
Annual probability of an obese woman achieving normal weight
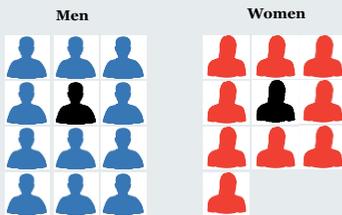

Annual probability of a morbidly obese man achieving normal weight
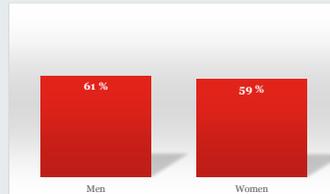

Annual probability of a morbidly obese woman achieving normal weight

Annual probability of achieving a 5% reduction in body weight for patients with simple obesity

Men   Women

Percentage of participants who lost 5% body weight who subsequently regained that weight

61 %   59 %

Men   Women

Key findings

- The probability of obese patients attaining normal body weight was very low
  - (and this declined with increasing BMI category)

- The probability of patients achieving a 5% body weight loss was considerably higher
  - (although the majority of these patients went on to regain the lost weight)

Recording of BMI in primary care

Sample

- Participants aged ≥30 years
- Equal numbers of men and women
- Registered with CPRD between 2005 & 2012
- N= ~300,000

Recording of BMI in primary care

Findings
- 31% of participants had no BMI recorded
- More women had BMI recorded annually than men
- Annual recording increased over the study period
- Mean BMI in both genders was in the overweight category

Predictors of BMI recording
- Female, middle-age, more obese, ex-smoker, deprived, co-morbidities

Weight management interventions

Sample
- Obese & overweight patients
- Participants aged ≥30 years
- N=91,413
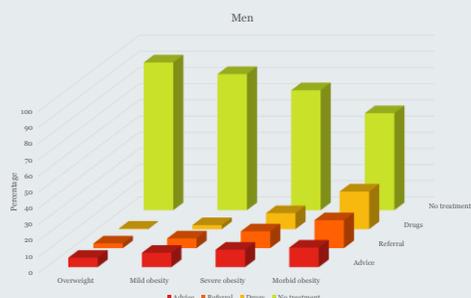
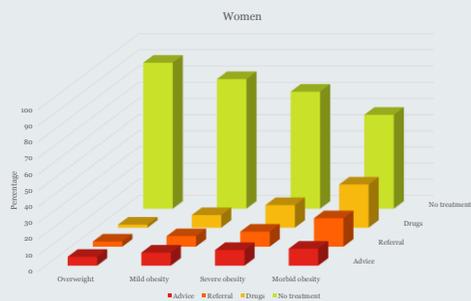## Weight management interventions

Interventions

Referrals

Advice

Prescriptions

Weight management interventions

Weight management interventions

Weight management interventions

Predictors of treatment after a record for overweight/obesity

- Female
- More obese
- Former smoker
- Age
- More deprived
- Co-morbidity

Obesity management in primary care

- Large datasets with 'real practice snapshot'?
- What isn't being recorded?
- Selection biases?

Systematic review

- Behavioural weight loss interventions
- Delivered in primary care

Included 15 RCTs (n=4,359)
Meta-analysis

Mean weight loss at 12m -1.36kg (-2.10 to -0.63)
Mean weight loss at 24m -1.23kg (-2.28 to -0.18)