Health survey analysis

with PowerBI

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Agenda

1. Introduction.
2. Data dictionary.
3. Table and insight fact to show age of participants and BMI.
4. Which type of IBD tends to have sufferers of a higher BMI?
5. Which type of IBD has more sufferers that smoke or previously smoked?
6. Which type of IBD has more cancer sufferers?
7. Which type of IBD has more heart disease sufferers?
8. Which age group is most effected by Ulcerative colitis (diagnosis type 2 in dataset) ? (comparing male and female)

Introduction

Dataset is made up of around 33,000 patients who answered a survey about their health all participants suffer from either Crohn's or Ulcerative colitis disease(both IBD diseases).

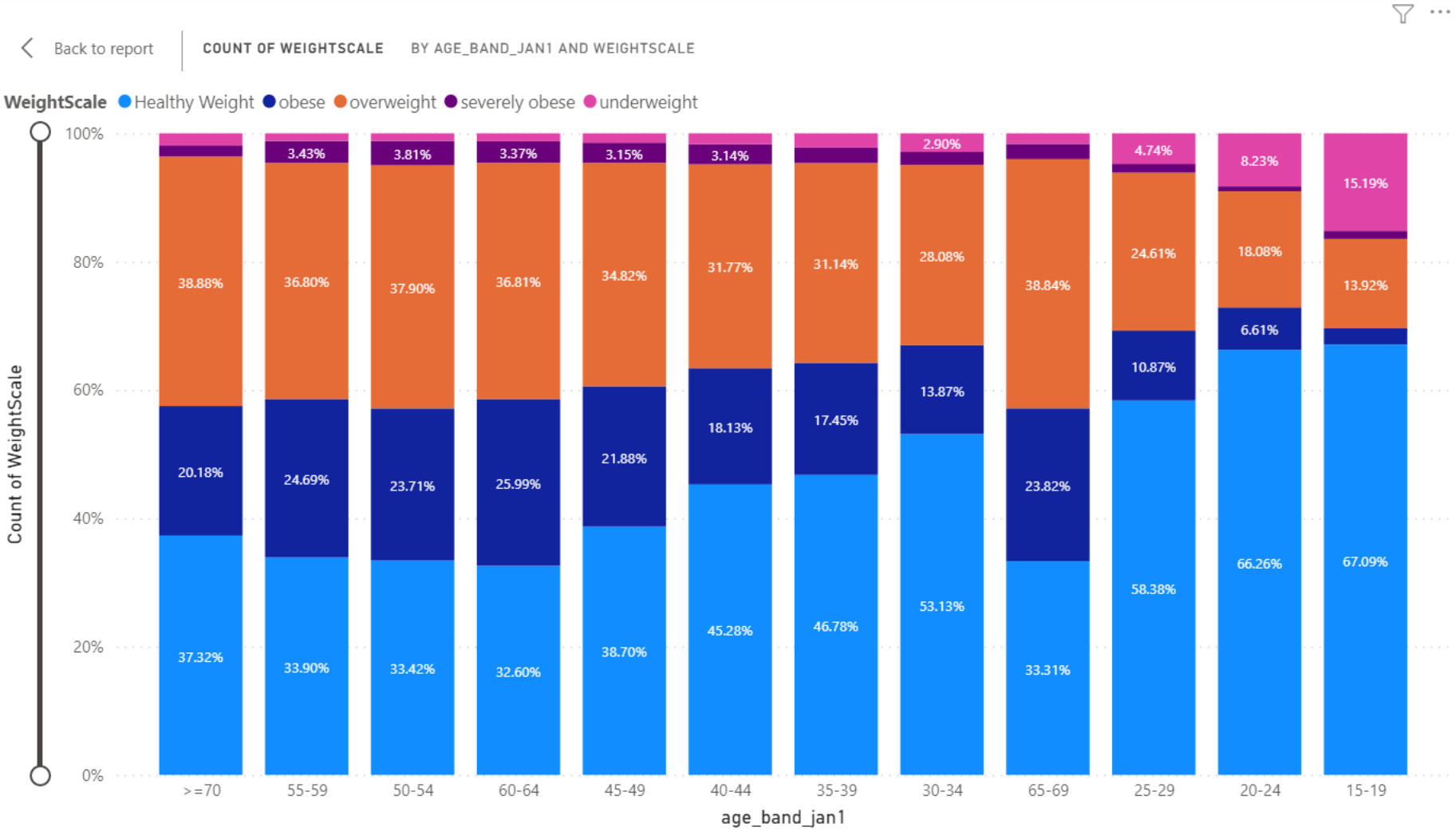
Dataset contains information of patient's gender, BMI(weight scale), diagnosis(type of disease), hospital admission, age range, smoker, past smoker, diet and cancer or heart disease.

Visuals needed to spot some insights.

Data dictionary

Table 1

Information	Fieldname in dataset	Coding
Bmi	bmi	
Approx. age	age_band_jan1	
Gender	gender	1=male, 2=female
Specific diet type	diet_preference	
Type of IBD affected by	diagnosis	1, Crohn's
		2, UC
		3, IBD - type unspecified (IBDU)
		4, Other
Hospital for treatment	hosp_admin	1, Yes l 2, No l 3, Not known
Cancer - yes/no	cancer	
heart disease - yes/no	heart_disease	
Current or past Smokers – yes/no	smoker	
	past_smoker	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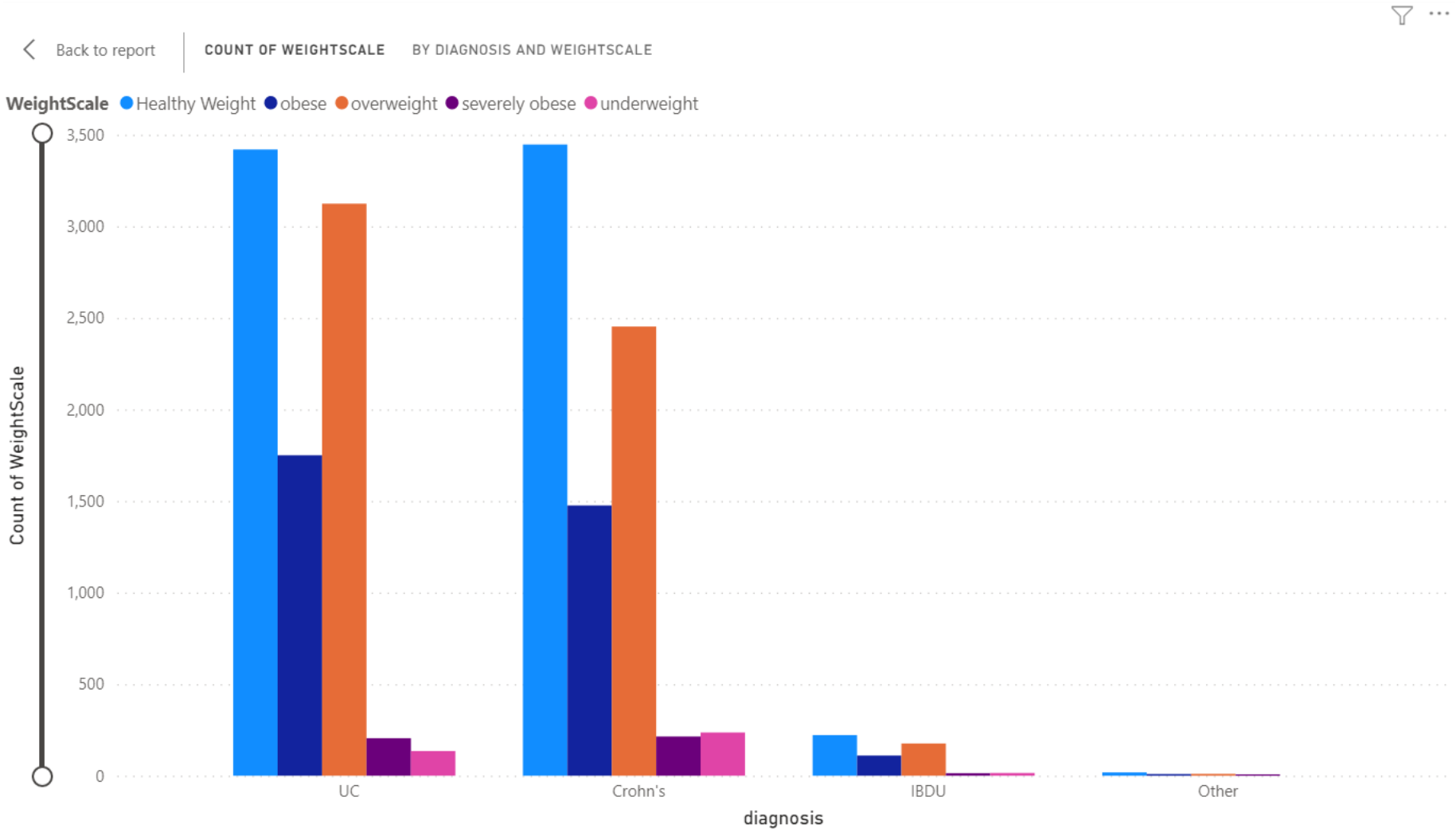
COUNT OF WEIGHTSCALE BY AGE_BAND_JAN1 AND WEIGHTSCALE
WeightScale Healthy Weight obese overweight severely obese underweight
Count of WeightScale
100%
80%
60%
40%
20%
0%
>=70 55-59 50-54 60-64 45-49 40-44 35-39 30-34 65-69 25-29 20-24 15-19
age_band_jan1
38.88% 20.18% 37.32%
3.43% 36.80% 24.69% 33.90%
3.81% 37.90% 23.71% 33.42%
3.37% 36.81% 25.99% 32.60%
3.15% 34.82% 21.88% 38.70%
3.14% 31.77% 18.13% 45.28%
31.14% 17.45% 46.78%
2.90% 28.08% 13.87% 53.13%
38.84% 23.82% 33.31%
4.74% 24.61% 10.87% 58.38%
8.23% 18.08% 6.61% 66.26%
15.19% 13.92% 67.09%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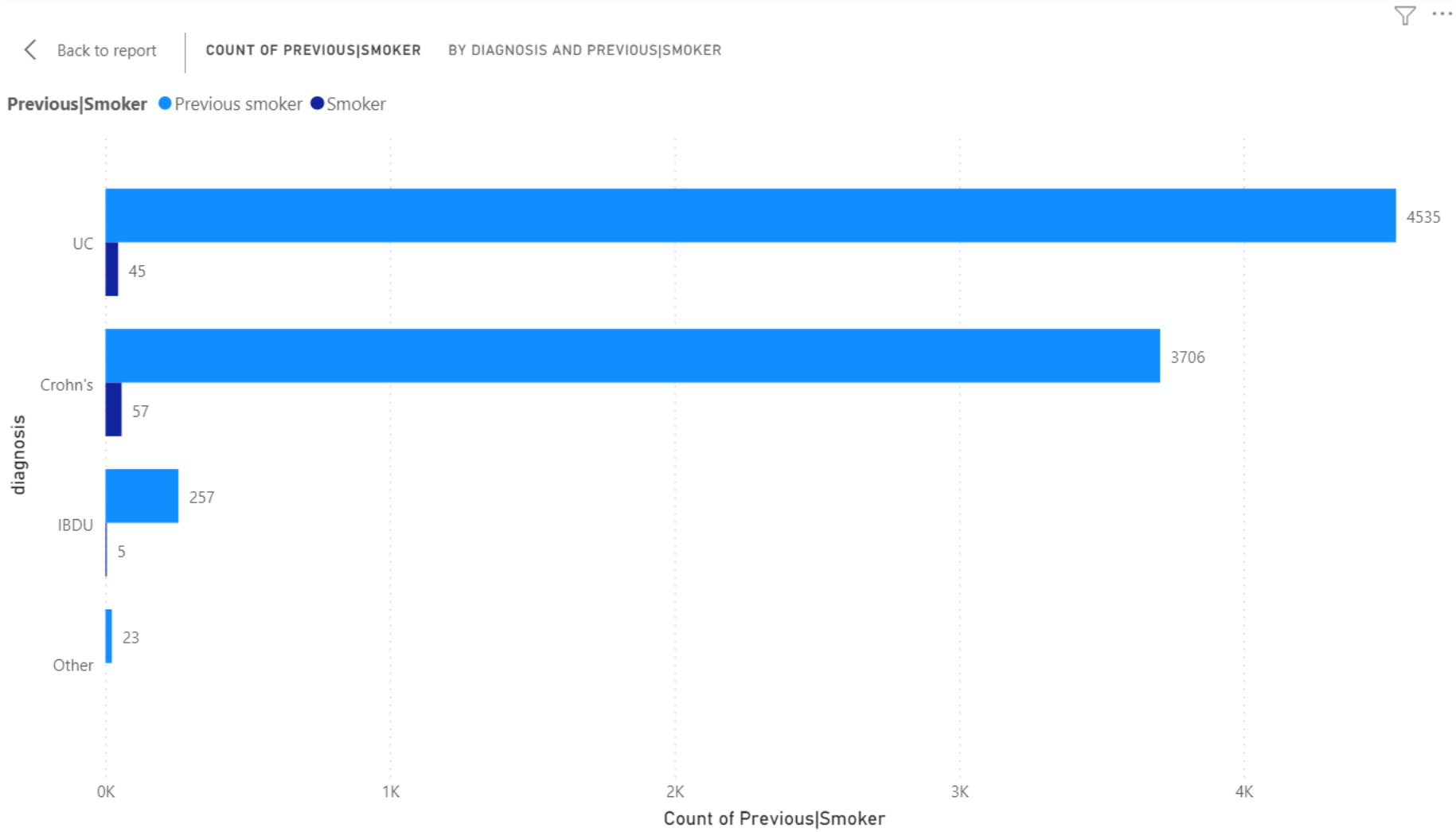
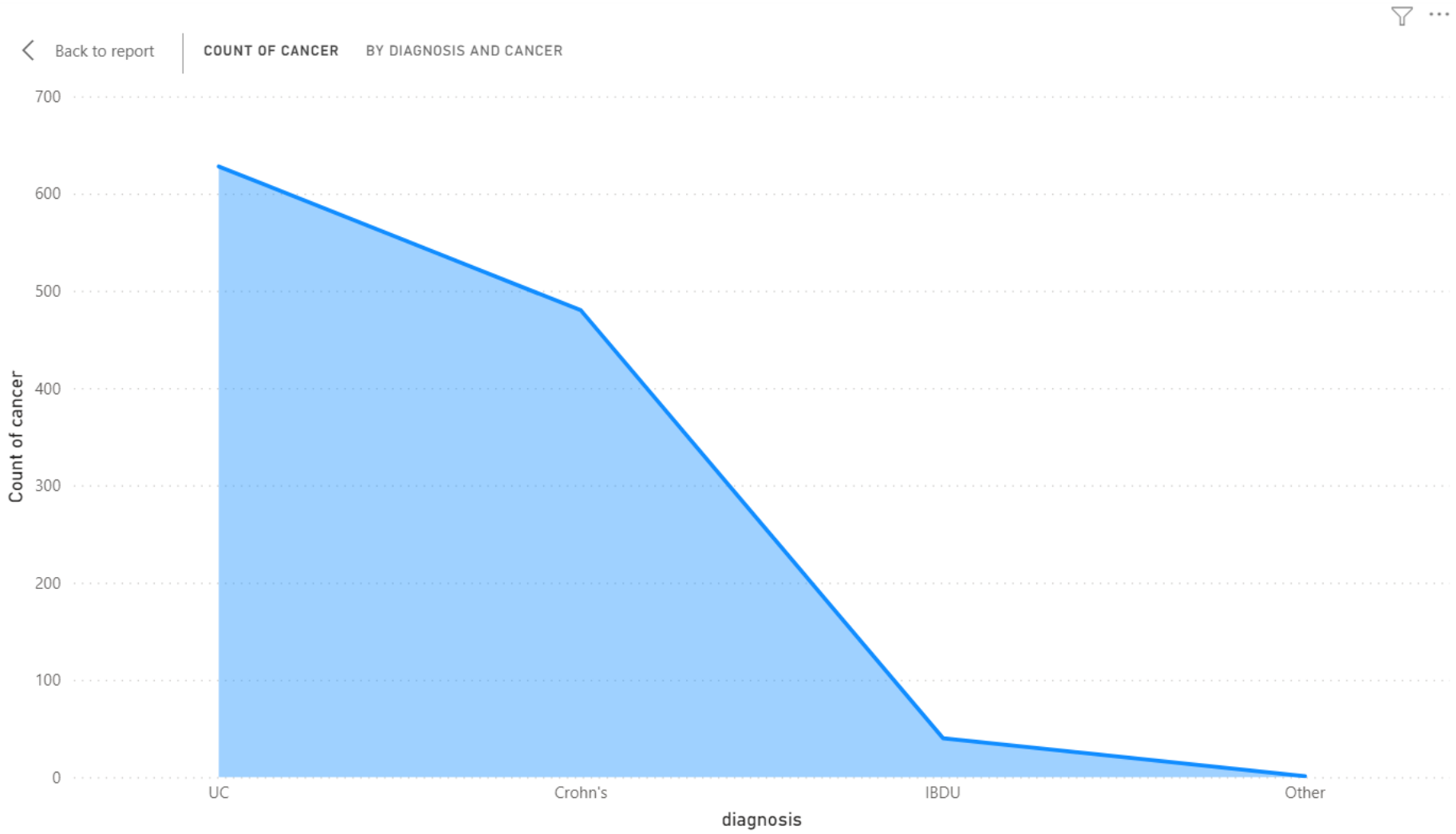
COUNT OF WEIGHTSCALE
BY DIAGNOSIS AND WEIGHTSCALE
WeightScale
Healthy Weight
obese
overweight
severely obese
underweight
Count of WeightScale
3,500
3,000
2,500
2,000
1,500
1,000
500
0
UC
Crohn's
IBDU
Other
diagnosis

Which type of IBD has more sufferers that smoke or previously smoked?

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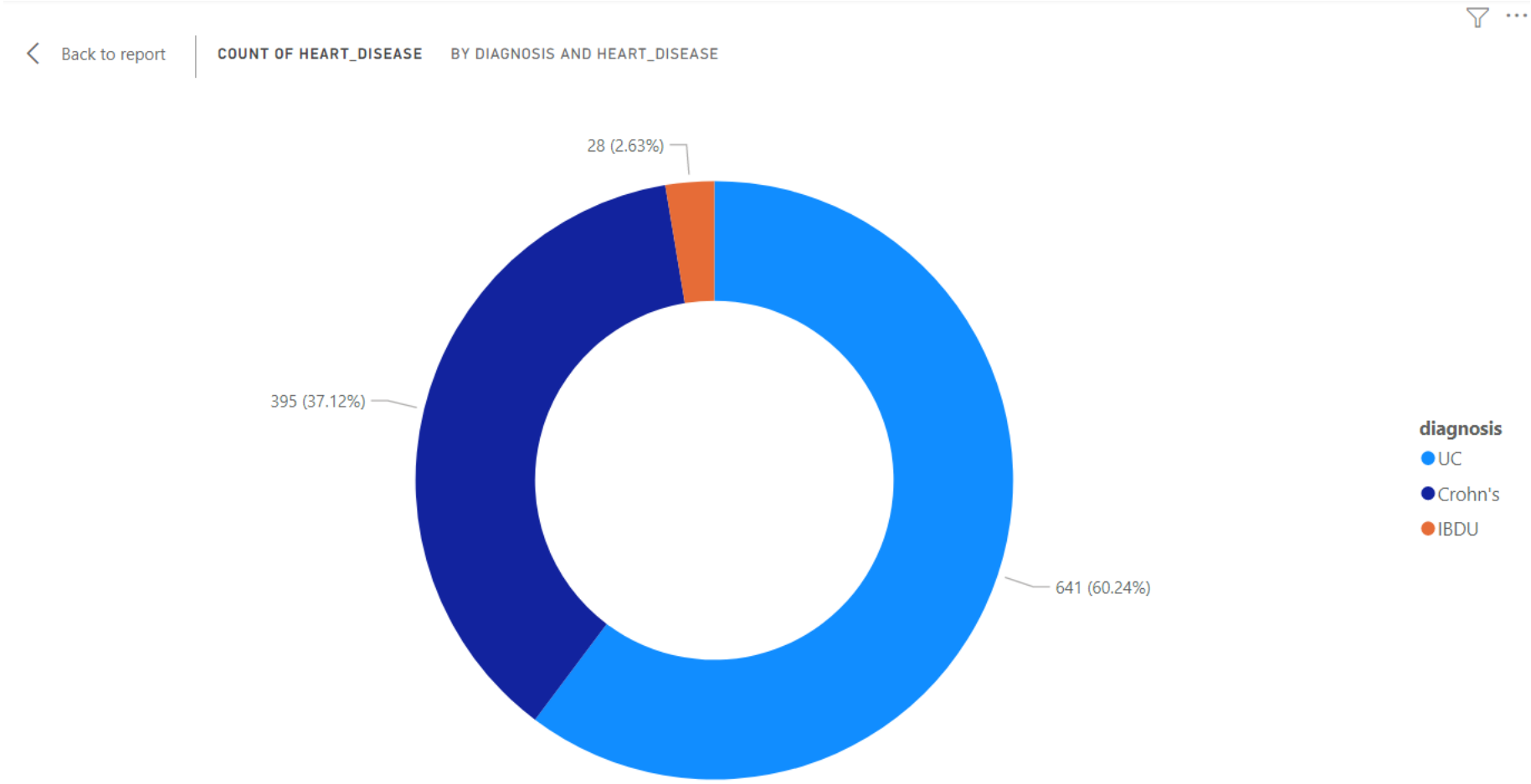
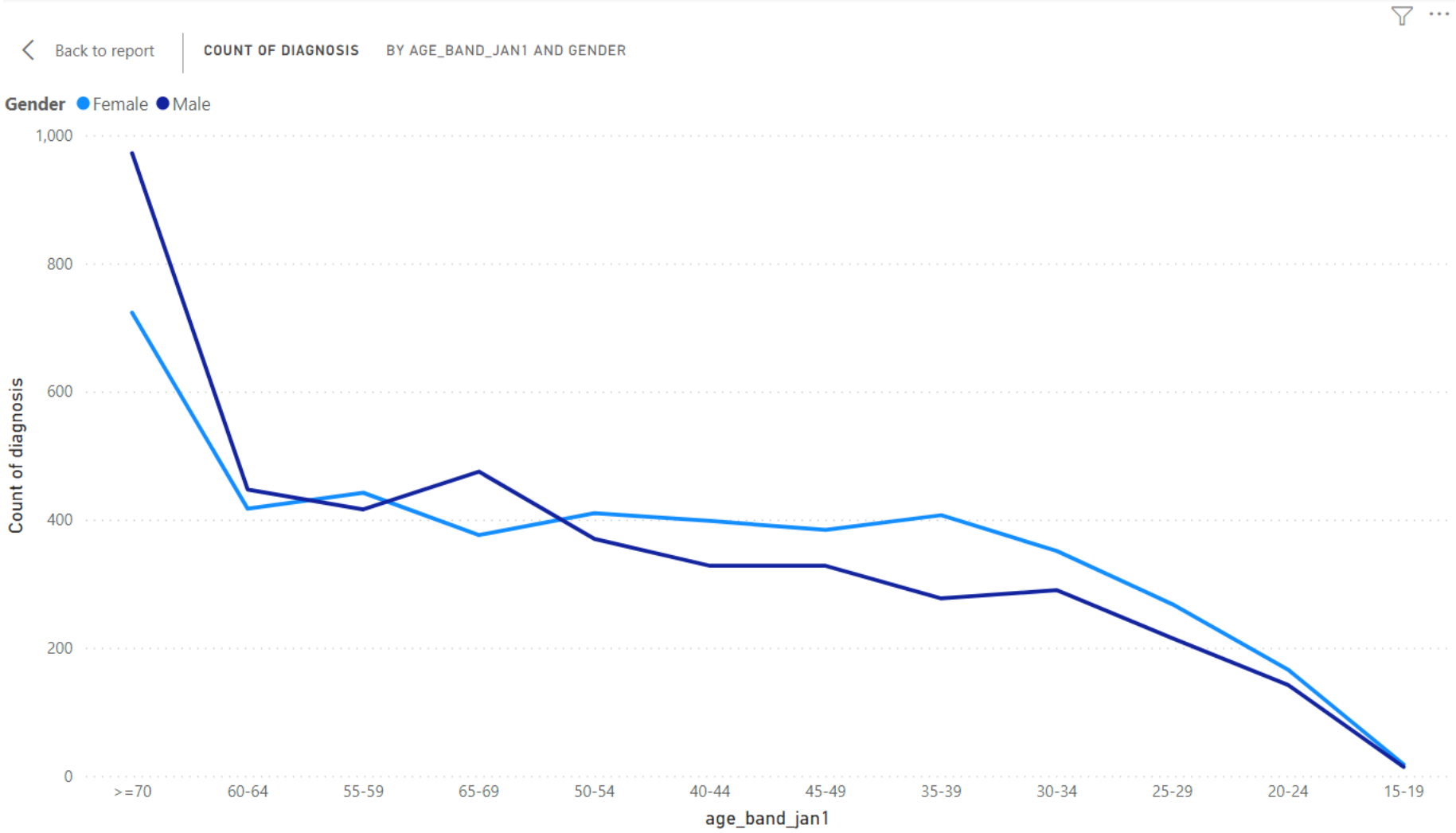
COUNT OF CANCER
BY DIAGNOSIS AND CANCER
700
600
500
400
300
200
100
0
Count of cancer
UC
Crohn's
IBDU
Other
diagnosis

Which type of IBD has more heart disease sufferers?

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COUNT OF DIAGNOSIS
BY AGE_BAND_JAN1 AND GENDER
Gender
Female
Male
1,000
800
600
400
200
0
Count of diagnosis
>=70
60-64
55-59
65-69
50-54
40-44
45-49
35-39
30-34
25-29
20-24
15-19
age_band_jan1