



The Incidence of Inflammatory Bowel Disease in the Manawatu region 2011 – 2015

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IBD INCIDENCE

CANTERBURY

- 2004, IBD 25.2, CD 16.5, UC 7.6 (Gearry et al., 2006)
- 2014 (follow-up), IBD 39.5, CD 26.4, UC 12.6 (1.6 fold increase) (Su, Gupta, Day, & Gearry, 2015).

NELSON

- 2012, CD 15.2 (as cited in Day, Lemberg, & Gearry, 2014)

OTAGO

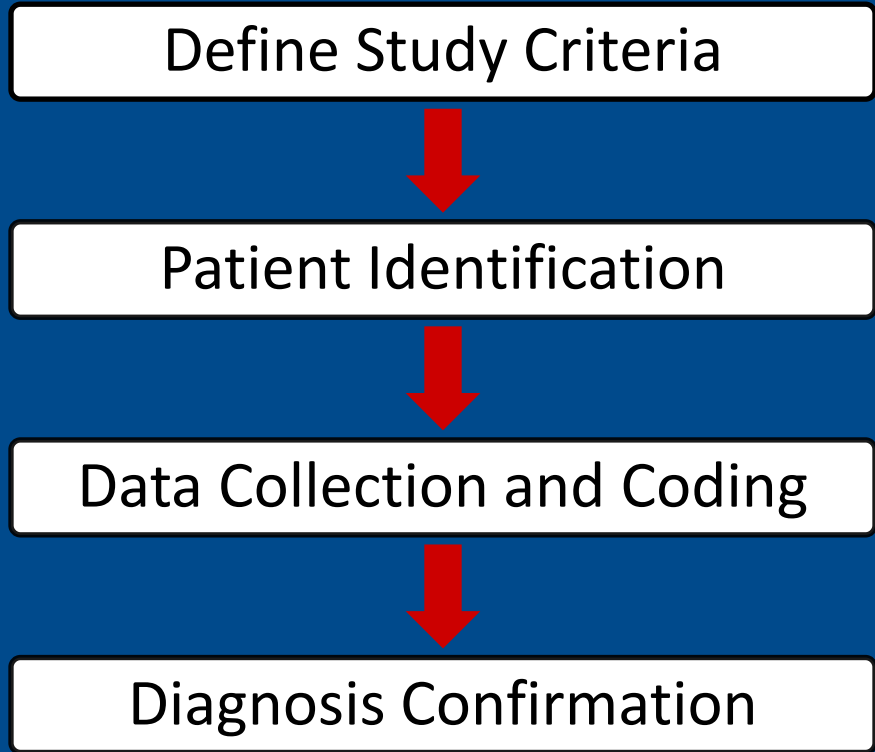
- 2006, CD 1.8 and UC 2.8
- 2012, CD 21.8 and UC 6.3 (annual age standardised) (Coppell et al., 2018)

High reported incidences:

- CD 20.2 in Nova Scotia (1998-2000), CD 20.2 in Quebec (1998-2000).
- UC 31.5 (2010-2014) in the Faroe Islands, Denmark, UC 19.5 in Nova Scotia (1998-2000)



METHODOLOGY





INCIDENCE CRITERIA

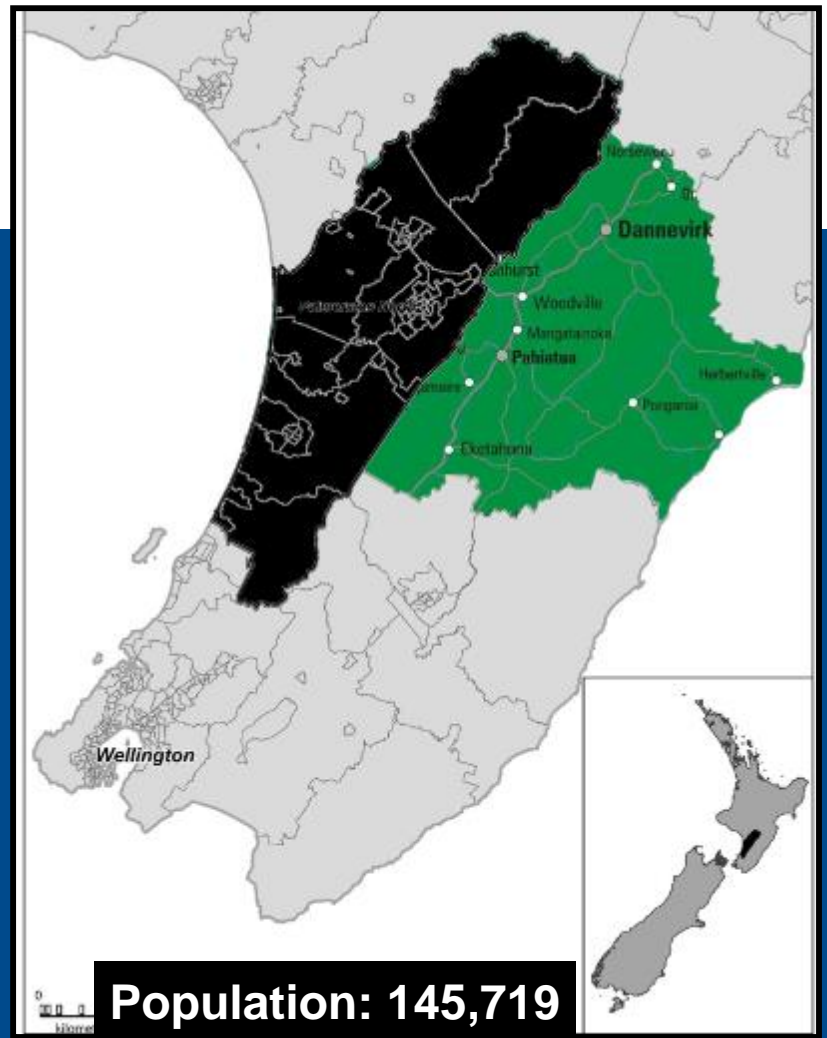
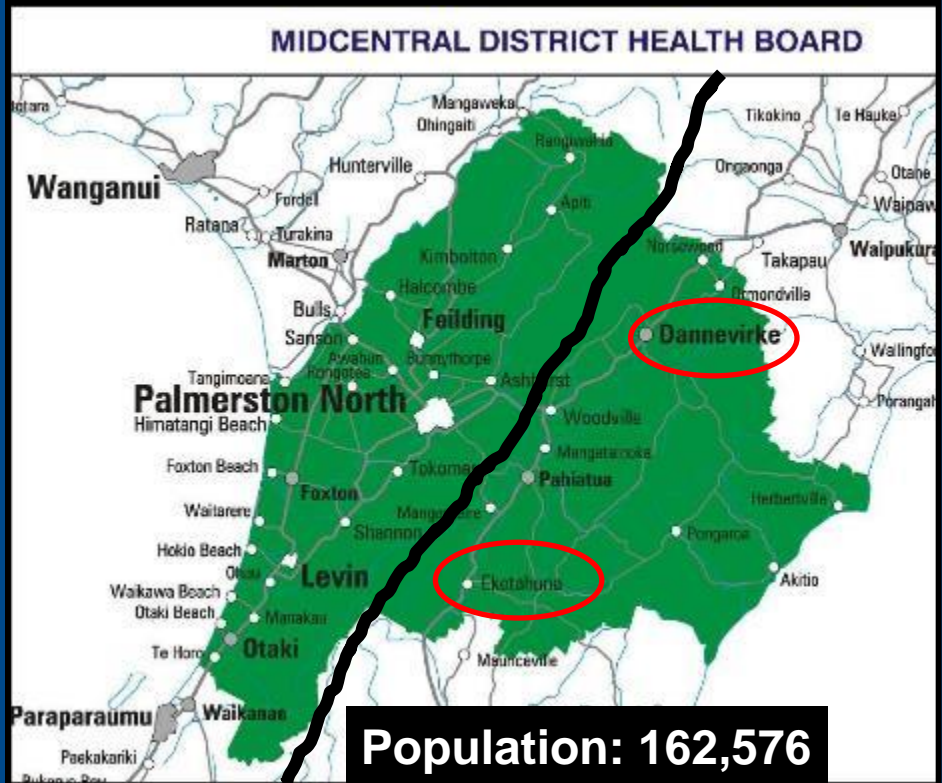
Inclusion criteria

- Diagnosis of IBD between 1 January 2011 - 31 December 2015.
- Domicile in study region at the time of diagnosis.

Exclusion criteria

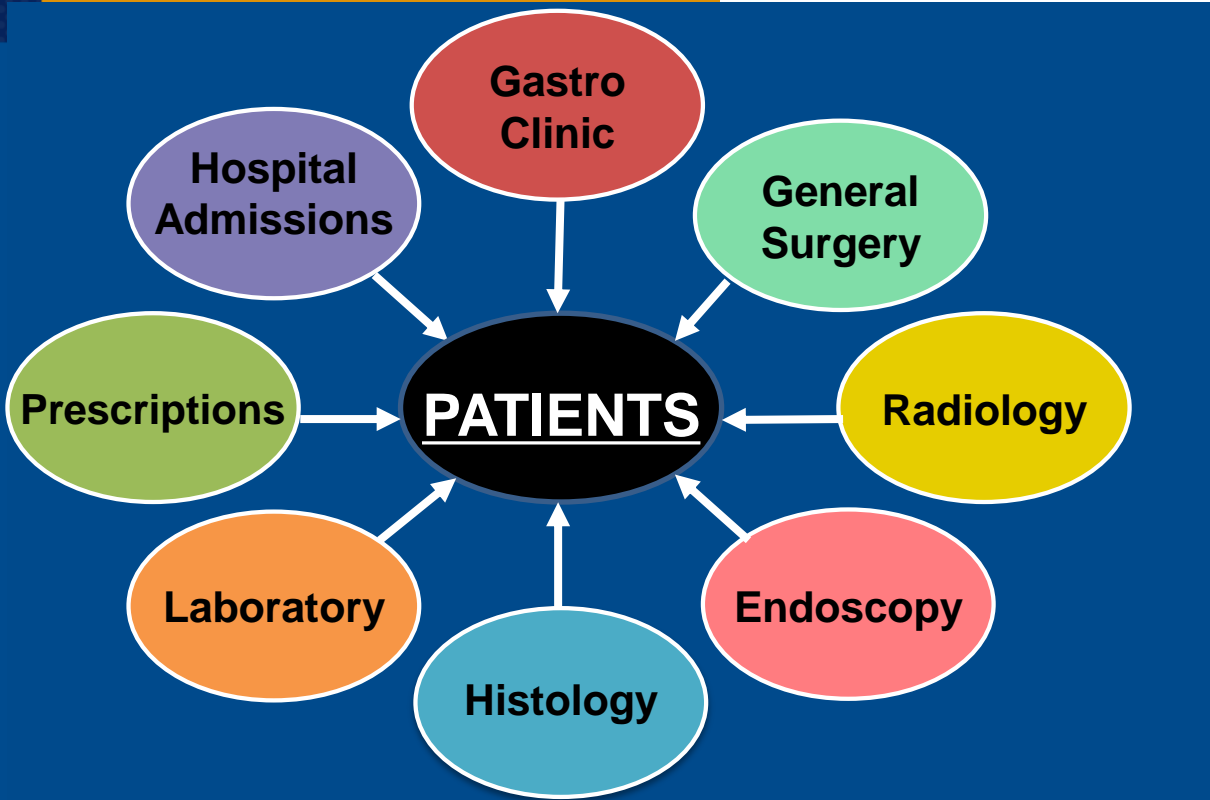
- Diagnosis of IBD
 - Outside the study's time frame
 - Outside the geographical data collection area
- Alternative diagnosis eg Ischaemic colitis

STUDY REGION





PATIENT IDENTIFICATION



IBD Keywords

- Crohns / Chrons / Crohn's / Chron's
- Colitis
- Fistula
- Ileitis
- Indeterminate
- Inflammatory Bowel
Inflammatory Bowel
- Ulcerative
- Adalimumab / Humira
- Azathioprine
- Infliximab
- Mercaptopurine
- Asacol / Mesalazine
Mesalazine / Pentasa
- Methotrexate
- Sulfa* / Sulph*



DIAGNOSIS CRITERIA

- 1) Symptom Chronicity (≥ 6 weeks)
- 2) Objective Evidence of Chronicity of Inflammation (histological or ≥ 2 radiological)

Lennard-Jones criteria, 1989.

<u>ULCERATIVE COLITIS</u> (both features)	<u>CROHN'S DISEASE</u> (two features)	
<ul style="list-style-type: none">• Continuous mucosal inflammation without granulomata• Affecting the rectum and some or all of the colon in continuity with the rectum	<ul style="list-style-type: none">• Non-colonic location• Transmural• Lymphoid	<ul style="list-style-type: none">• Discontinuous• Fibrosis• Colonic Mucin• Granulomata

RESULTS: Patient Identification

	RECORDS REVIEWED	UNIQUE PATIENTS	IBD KEYWORD HITS	INCIDENT PATIENTS	PREVALENCE PATIENTS
<u>TOTAL</u>	NA	NA	5,166	<u>223</u>	<u>613</u>
Histology	7,223	5,748	1,050	203	284
MDHB Endoscopy	7,167	5,664	1,049	183	322
Prescriptions	7,026,718	186,125	1,405	174	496
MDHB Gastroenterology	17,770	6,851	1,381	155	380
Laboratory	NA	NA	652	105	253
MDHB Surgery Clinic	49,849	18,307	1,606	95	233
MDHB Radiology	NA	NA	1,036	76	154
MDHB Inpatient	647,838	83,948	265	69	145
PRIVATE Gastroenterology	7,166	4,179	838	39	127
PRIVATE Radiology	NA	NA	150	5	14

RESULTS



MIDCENTRAL DISTRICT HEALTH BOARD

Te Pae Hauora o Ruahine o Tairāroa



MASSEY UNIVERSITY

TE KUNENGA KI PŪREHUOA

UNIVERSITY OF NEW ZEALAND

	ANNUAL INCIDENCE 2011-2015 (per 100,000)	PREVALENCE 2013 (per 100,000)
IBD	30.6	420.7
CD	16.7 (54.7%)	230.6 (55.0%)
UC	11.4 (37.2%)	179.1 (42.6%)
IBD-TU	2.5 (8.1%)	10.3 (2.4%)



DEMOGRAPHICS

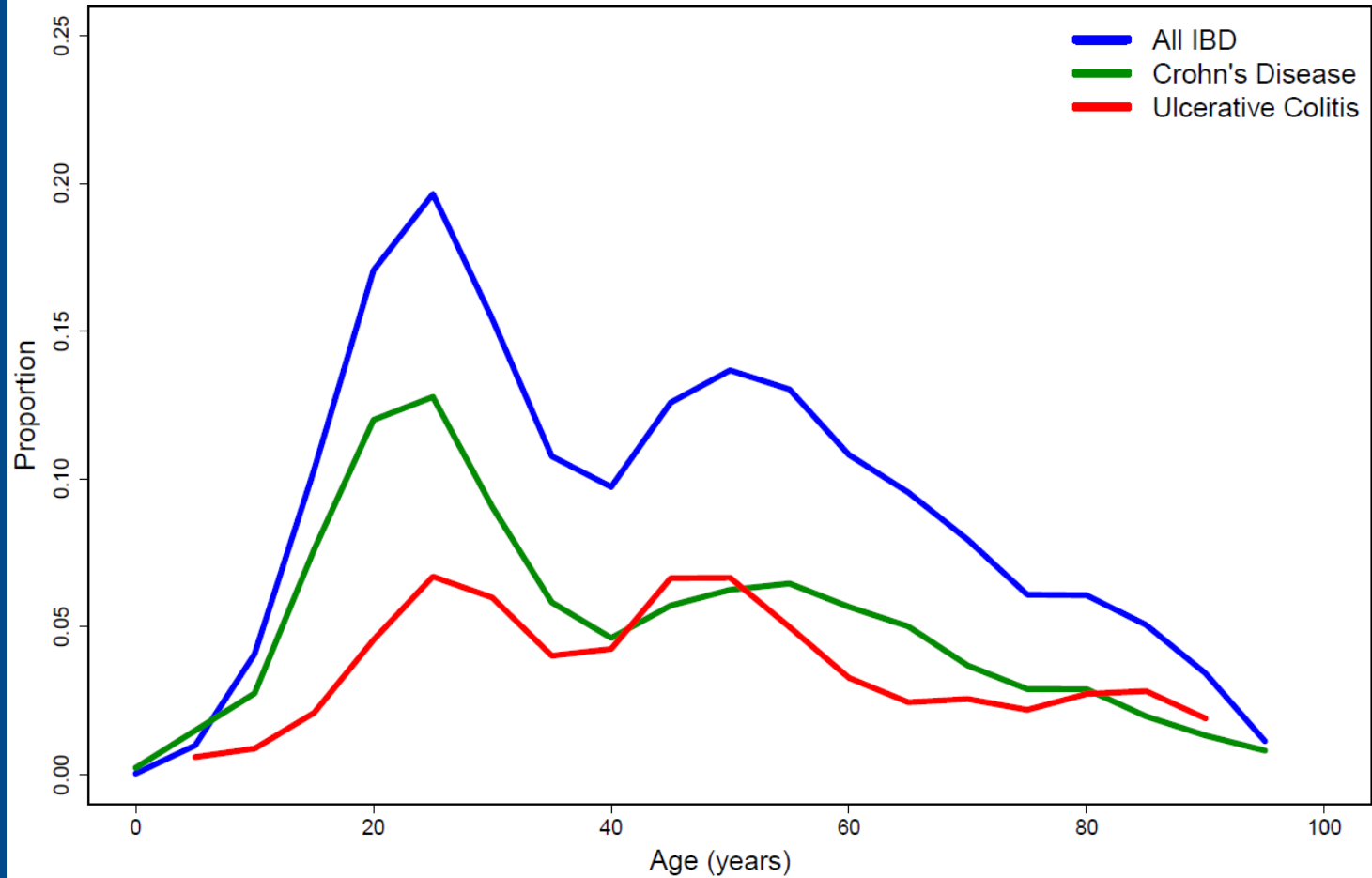
Gender Distribution

	IBD	CD	UC	IBD-TU
Female	126 (57%)	72 (59%)	45 (54%)	10 (56%)
Male	96 (43%)	50 (41%)	38 (46%)	8 (44%)

Smoking

	<u>SMOKING STATUS AT DIAGNOSIS</u>			
	Never Smoker	Ex Smoker	Current Smoker	Unknown
CD	60 (48.8%)	29 (23.6%)	29 (23.6%)	5 (4.1%)
UC	40 (48.8%)	33 (40.2%)	7 (8.5%)	2 (2.4%)
IBD-TU	9 (50.0%)	8 (44.4%)	1 (5.6%)	0

Age at IBD Diagnosis





PHENOTYPIC PRESENTATION

MONTREAL CLASSIFICATION

Crohn's Disease

Location	n
L1	41 (33.6%)
L2	42 (34.4%)
L3	36 (29.5%)
L4	3 (2.5%)

Behaviour	n
B1	103 (85.1%)
B2	9 (7.4%)
B3	9 (7.4%)
Perianal Disease	9 (7.4%)

Ulcerative Colitis

Extent	n
E1	22 (27.2%)
E2	26 (32.1%)
E3	33 (40.7%)



SUMMARY

RESULTS

- **IBD INCIDENCE (2011-2015):** 30.6 per 100,000
- **POINT PREVALENCE (2013):** IBD 420.7 per 100,000
- **HIGHEST INCIDENCE PATIENT IDENTIFICATION**
Histology (91%) > MDHB Endoscopy (83%) > Prescriptions (79%)
- **HIGHEST PREVALENCE PATIENT IDENTIFICATION**
Prescriptions (75%) > MDHB Gastroenterology Clinic (57%) > MDHB Endoscopy (49%)



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HISTOLOGY

- Laboratory coding error (n=2)
- Outside MDHB (Paediatric patient) (n=1)
- No evidence of chronicity of inflammation (n=14)
- No histology (n=3)

LENNARD-JONES CRITERIA

CD FEATURES	DIAGNOSIS	1 YEAR
3	59 (48.8%)	67 (55.4%)
2	62 (51.2%)	54 (44.6%)

