Participant flow

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┌─────────────────────────────────────────┐
│ 19 GP practices across the East Midlands,│
│ UK identified MLTC patients and sent the │
│ survey                                   │
└─────────────────────────────────────────┘
                    │
                    ▼
┌─────────────────────────────────────────┐
│ 2,456 patients with MLTC                 │
│ completed survey                         │
└─────────────────────────────────────────┘
          │              │
          │              ▼
          │     ┌──────────────────────────┐
          │     │ Excluded                 │
          │     │ Age <45 years        2   │
          │     └──────────────────────────┘
          ▼
┌─────────────────────────────────────────┐
│ N = 2,454                                │
└─────────────────────────────────────────┘
                    │
                    ▼
┌─────────────────────────────────────────┐
│ Main analysis uses the trade-off         │
│ principle of first-choice HOPT           │
└─────────────────────────────────────────┘
          │              │
          │              ▼
          │     ┌──────────────────────────┐
          │     │ Current HOPT             │
          │     │                          │
          │     │ Excluded                 │
          │     │ Missing an outcome   405 │
          │     │ Same ranking         868 │
          │     └──────────────────────────┘
          ▼
┌─────────────────────────────────────────┐
│ N = 1,181                                │
└─────────────────────────────────────────┘
          │              │
          │              ▼
          │     ┌──────────────────────────┐
          │     │ Before COVID-19 HOPT     │
          │     │                          │
          │     │ Excluded                 │
          │     │ Missing an outcome    70 │
          │     │ Same ranking         227 │
          │     └──────────────────────────┘
          ▼
┌─────────────────────────────────────────┐
│ Before COVID-19 and Current HOPT         │
│                                          │
│ N= 884                                   │
└─────────────────────────────────────────┘
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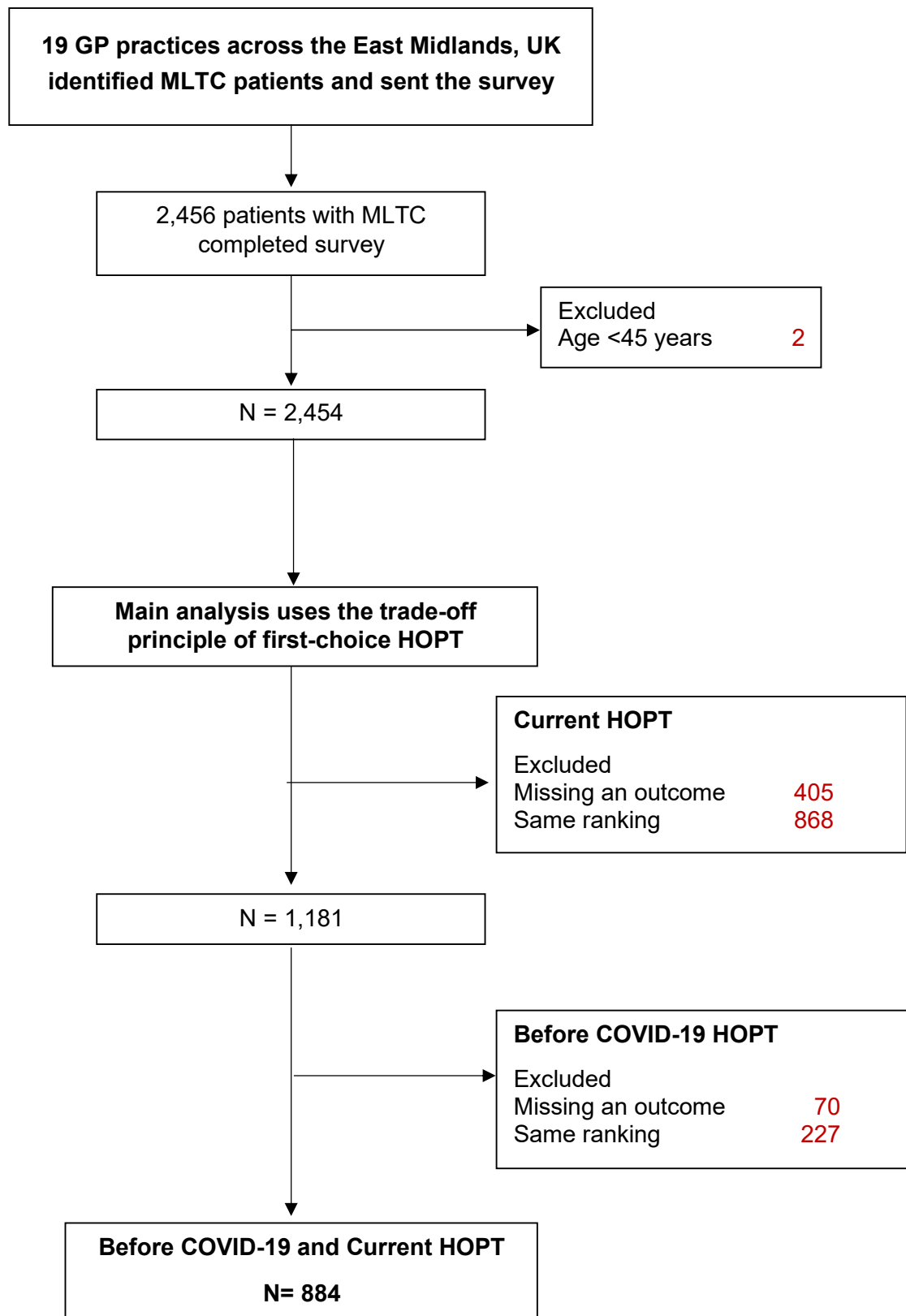
MLTC=multiple long-term conditions; HOPT=health outcome priority tool.

Baseline characteristics

Characteristics	N (%)
Total	884
Age, y, mean [SD]	64.0 [10.0]
45 - 65 y	483 (54.6)
≥ 65 y	398 (45.0)
Missing	3 (0.3)
Gender	
Female	491 (55.5)
Male	379 (42.9)
Prefer not to say or missing	14 (1.6)
Ethnicity	
White	821 (92.9)
Non-white	47 (5.3)
Missing	16 (1.8)
Education	
None	141 (16.0)
GCSE, A Levels or equivalent	424 (48.0)
Higher education	239 (27.0)
Other (e.g., NVQ, nursing, missing)	80 (9.1)
Employment status	
Working	297 (33.6)
Unemployed	69 (7.8)
Retired	445 (50.3)
Other (student, volunteer, missing)	73 (8.3)
Taking regular medication	
Yes	836 (94.6)
No	44 (5.0)
Missing	4 (0.5)
Number of medications, median [IQR]	5 [3-7]
Polypharmacy (≥5 medications)	472 (57.7)
At high risk of COVID-19 (vulnerable)	
Yes	605 (68.4)
No	270 (30.5)
Missing	9 (1.0)
No. conditions*, median [IQR]	3 [2-4]
Cardiometabolic	584 (66.1)
Musculoskeletal or chronic pain	480 (54.3)
Mental health	324 (36.7)
Respiratory	291 (32.9)

Shown are the number of subjects (%) unless stated otherwise.

Y=years; SD=standard deviation; No.=number; IQR=interquartile range.

* Self-reported long-term conditions.

Cardiometabolic: diabetes, heart disease, atrial fibrillation, high blood pressure, stroke.
Musculoskeletal and chronic pain: arthritis, osteoporosis, long-term pain.
Mental health: depression and anxiety.
Respiratory: chronic obstructive pulmonary disease, asthma, and obstructive sleep ap

Outcome measures

Current first-choice health outcome priority by respondent sociodemographic factors and clusters of conditions

Shown are the number of subjects (%) using row totals. P-values calculated by Chi squared test.

	Maintaining independence	Keeping Alive	Reducing pain	Reducing other symptoms	P-value
All participants (n=884)	288 (32.6)	386 (43.7)	121 (13.7)	89 (10.1)	
Age					
45 - 65 y	138 (28.6)	229 (47.4)	66 (13.7)	50 (10.4)	
≥ 65 y	149 (37.4)	156 (39.2)	54 (13.6)	39 (9.8)	0.034
Gender					
Female	171 (34.8)	201 (40.9)	69 (14.1)	50 (10.2)	
Male	114 (30.1)	179 (47.2)	47 (12.4)	39 (10.3)	0.278
Ethnicity					
White	226 (32.4)	361 (44.0)	112 (13.6)	82 (10.0)	
Non-white	13 (27.7)	22 (46.8)	6 (12.8)	6 (13.8)	0.860
Education					
None	34 (24.1)	62 (44.0)	20 (14.2)	25 (17.7)	
GCSE, A Levels or equivalent	136 (32.1)	197 (46.5)	56 (13.2)	35 (8.3)	
Higher education	99 (41.4)	98 (41.0)	29 (12.1)	13 (5.4)	
Other (e.g., NVQ, nursing, missing)	19 (23.8)	29 (36.3)	16 (20.0)	16 (20.0)	<0.001
Employment status					
Working	81 (27.3)	160 (53.9)	34 (11.5)	22 (7.4)	
Unemployed	17 (24.6)	22 (31.9)	16 (23.2)	14 (20.3)	
Retired	170 (38.2)	173 (38.9)	59 (13.3)	43 (9.7)	
Other (student, volunteer, missing)	20 (27.4)	31 (42.5)	12 (16.4)	10 (13.7)	<0.001
At high risk of COVID-19					
No	70 (25.9)	119 (44.1)	48 (17.8)	33 (12.2)	
Yes	214 (35.4)	265 (43.8)	73 (12.1)	53 (8.8)	0.008
Cardiometabolic conditions					
No	84 (28.0)	131 (43.7)	43 (14.3)	42 (14.0)	
Yes	204 (34.9)	255 (43.7)	78 (13.4)	47 (8.1)	0.018
Musculoskeletal or chronic pain					
No	141 (34.9)	184 (45.5)	41 (10.2)	38 (9.4)	
Yes	147 (30.6)	202 (42.1)	80 (16.7)	51 (10.6)	0.030
Mental health conditions					
No	190 (33.9)	255 (45.5)	68 (12.1)	47 (8.4)	
Yes	98 (30.3)	131 (40.4)	53 (16.4)	42 (13.0)	0.029
Respiratory conditions					
No	196 (33.1)	267 (45.0)	77 (13.0)	53 (8.9)	
Yes	92 (31.6)	119 (40.9)	44 (15.1)	36 (12.4)	0.281

Before COVID-19 first-choice health outcome priority by respondent characteristics, N (%) row totals

	Maintaining independence	Keeping alive	Reducing pain	Reducing other symptoms	P-value
All participants (n=884)	301 (34.1)	335 (37.9)	156 (17.7)	92 (10.4)	
Age					
45 - 65 y	141 (29.2)	198 (41.0)	88 (18.2)	56 (11.6)	
≥ 65 y	160 (40.2)	136 (34.2)	67 (16.8)	35 (8.8)	0.006
Gender					
Female	181 (36.9)	162 (33.0)	96 (19.6)	52 (10.6)	
Male	118 (31.1)	168 (44.3)	55 (14.5)	38 (10.0)	0.006
Ethnicity					
White	279 (34.0)	315 (38.4)	142 (17.3)	85 (10.4)	
Non-white	14 (29.8)	19 (40.4)	9 (19.2)	5 (10.6)	0.946
Education					
None	43 (30.5)	45 (31.9)	27 (19.2)	26 (18.4)	
GCSE, A Levels or equivalent	134 (31.6)	174 (41.0)	79 (18.6)	37 (8.7)	
Higher education	98 (41.0)	87 (36.4)	36 (15.1)	18 (7.5)	
Other (e.g., NVQ, nursing, missing)	26 (32.5)	29 (36.3)	14 (17.5)	11 (13.8)	0.011
Employment status					
Working	89 (30.0)	134 (45.1)	48 (16.2)	26 (8.8)	
Unemployed	18 (26.1)	19 (27.5)	14 (20.3)	18 (26.1)	
Retired	176 (39.6)	159 (35.7)	73 (16.4)	37 (8.3)	
Other (student, volunteer, missing)	18 (24.7)	23 (31.5)	21 (28.8)	11 (15.1)	<0.001
At high risk of COVID-19					
No	80 (29.6)	102 (37.8)	52 (19.3)	36 (13.3)	
Yes	219 (36.2)	231 (38.2)	99 (16.4)	56 (9.3)	0.101
Cardiometabolic conditions					
No	90 (30.0)	102 (34.0)	69 (23.0)	39 (13.0)	
Yes	211 (36.1)	233 (39.9)	87 (14.9)	53 (9.1)	0.003
Musculoskeletal or chronic pain					
No	141 (34.9)	158 (39.1)	62 (15.4)	43 (10.6)	
Yes	160 (33.3)	177 (36.9)	94 (19.6)	49 (10.2)	0.437
Mental health conditions					
No	205 (36.6)	220 (39.3)	92 (16.4)	43 (7.7)	
Yes	96 (29.6)	115 (35.5)	64 (19.8)	49 (15.1)	0.001
Respiratory conditions					
No	198 (33.4)	227 (38.3)	108 (18.2)	60 (10.1)	
Yes	103 (35.4)	108 (37.1)	48 (16.5)	32 (11.0)	0.856

Shown are the number of subjects (%) using row totals. P-values calculated by Chi squared test.

Feasibility questions of patient's perceived usefulness of the health outcome prioritisation tool

Feasibility question	N (%)
1) The health outcome prioritisation tool was easy to complete	
Strongly agree	163 (18.4)
Agree	411 (46.5)
Neither agree nor disagree	184 (20.8)
Disagree	76 (8.6)
Strongly disagree	50 (5.7)
2) The health outcome prioritisation was relevant to my healthcare	
Strongly agree	76 (8.6)
Agree	414 (46.9)
Neither agree nor disagree	285 (32.3)
Disagree	72 (8.2)
Strongly disagree	35 (4.0)
3) The health outcome prioritisation tool will be useful in communicating what my priorities are to my doctor	
Strongly agree	86 (9.7)
Agree	440 (49.8)
Neither agree nor disagree	238 (26.9)
Disagree	77 (8.7)
Strongly disagree	43 (4.9)

Missing: 2 for question 2.

<u>Adverse events</u>

There were no adverse events associated with this study.