Changes in A&E attendance patterns since the covid19 lockdown

week 22 analysis

May 2020

The Strategy Unit.

NHS
Midlands and Lancashire
Commissioning Support Unit

Introduction

This document describes the changes that have taken place to patterns of attendances at accident and emergency departments since the covid19 lockdown on 23rd March 2020.

This analysis describes attendances at a representative subset of type 1 (24-hour consultant-led) A&E departments in England for the period up to the end of week 22 (2nd June).

Key messages

Attendance rates at type 1 units are increasing but had not returned to pre-lockdown levels by the end of week 22.

In the week following the lockdown, rates fell to about half of their normal level; by week 22 attendances were 25% below the usual level.

Reductions in attendance rates preceded the lockdown by 1-2 weeks.

Attendance rates are down for all presentation types, acuity levels, arrival modes and age groups.

Injury presentations fell more sharply following the lockdown than illness presentations, but have recovered more rapidly.

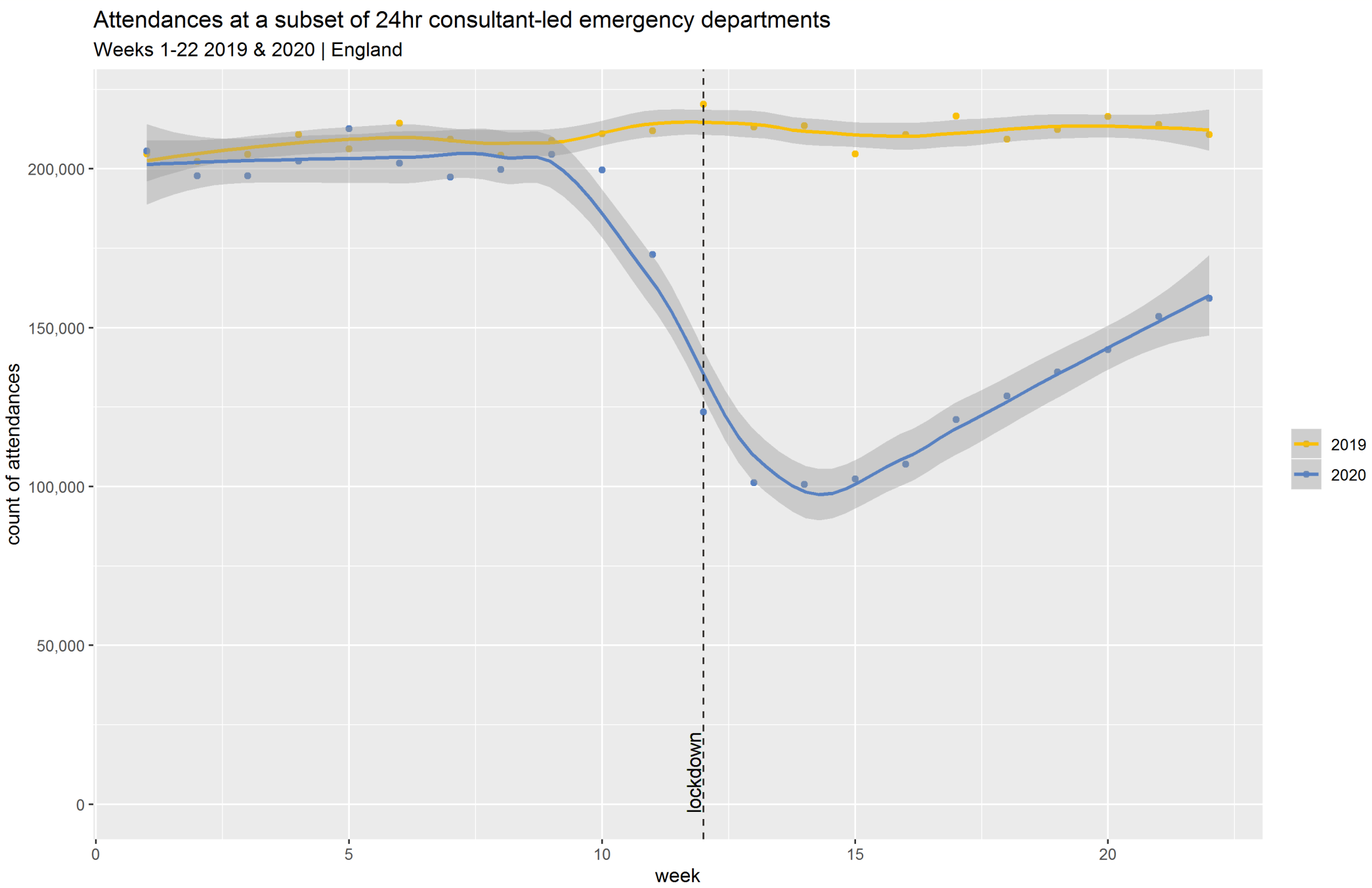
Injuries that are frequently associated with sporting activities fell at the fastest rates.

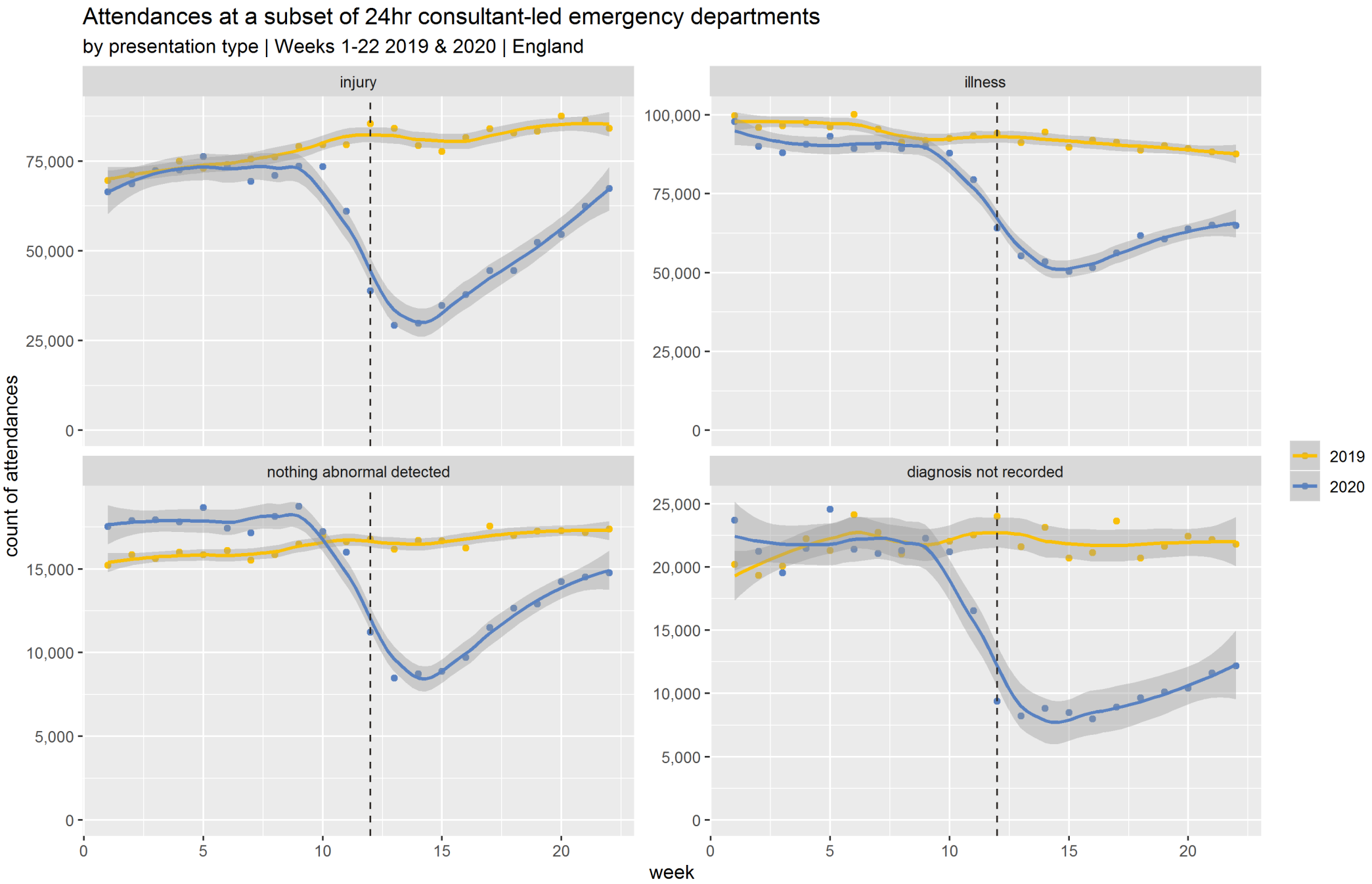
Rates of ambulance conveyance for injuries and attendances for burns and scolds, facio-maxilliary and visceral injuries had returned to pre-covid levels by week 22.

Illness presentations for children and those associated with obstetric, ENT and dermatological conditions fell most rapidly following the lockdown.

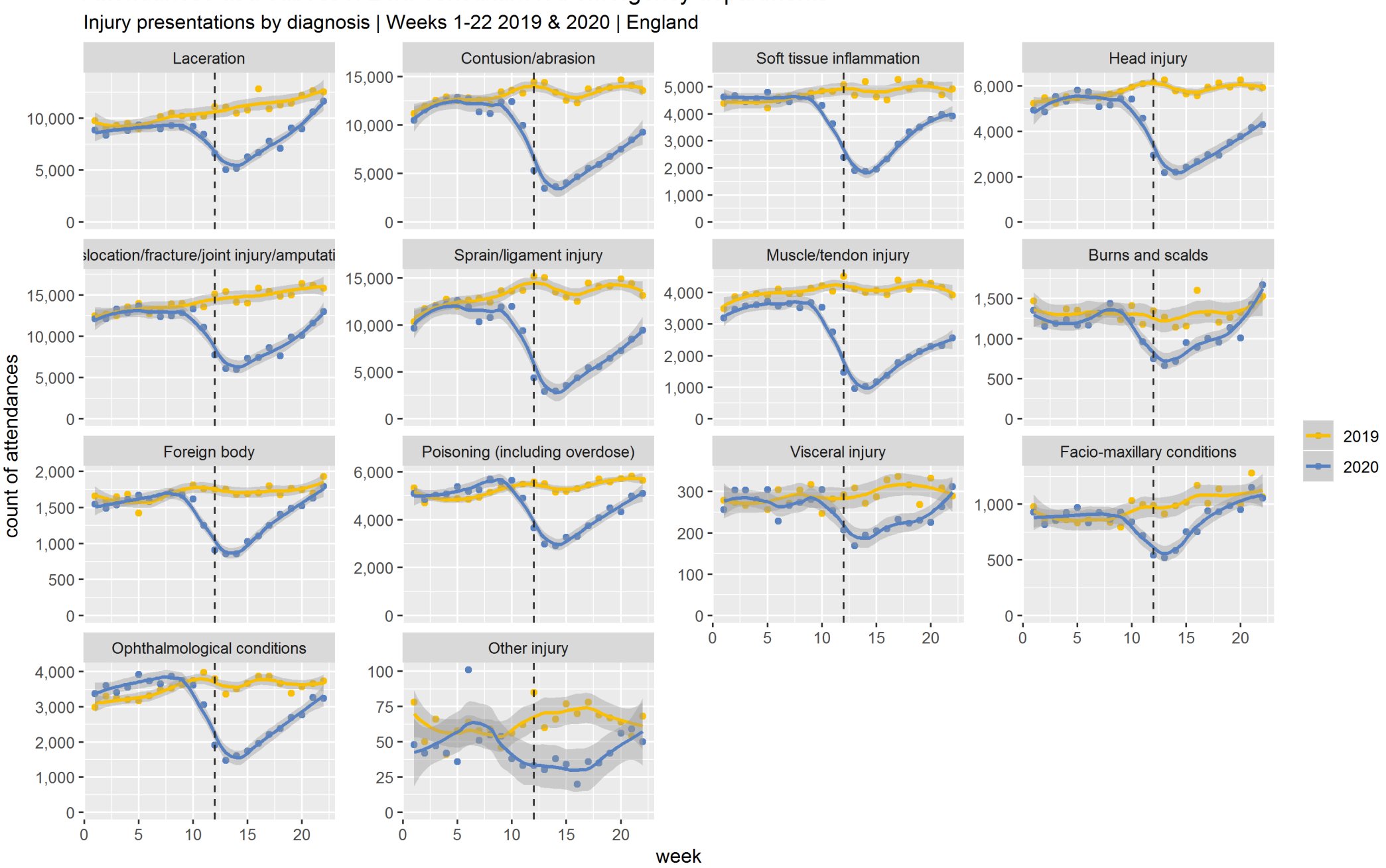
Whilst attendance rates for most illnesses have begun to rise sharply in recent weeks, presentations for the most immediately life-threatening conditions and for infectious diseases, respiratory conditions and septicaemia are increasing at a slower rate.

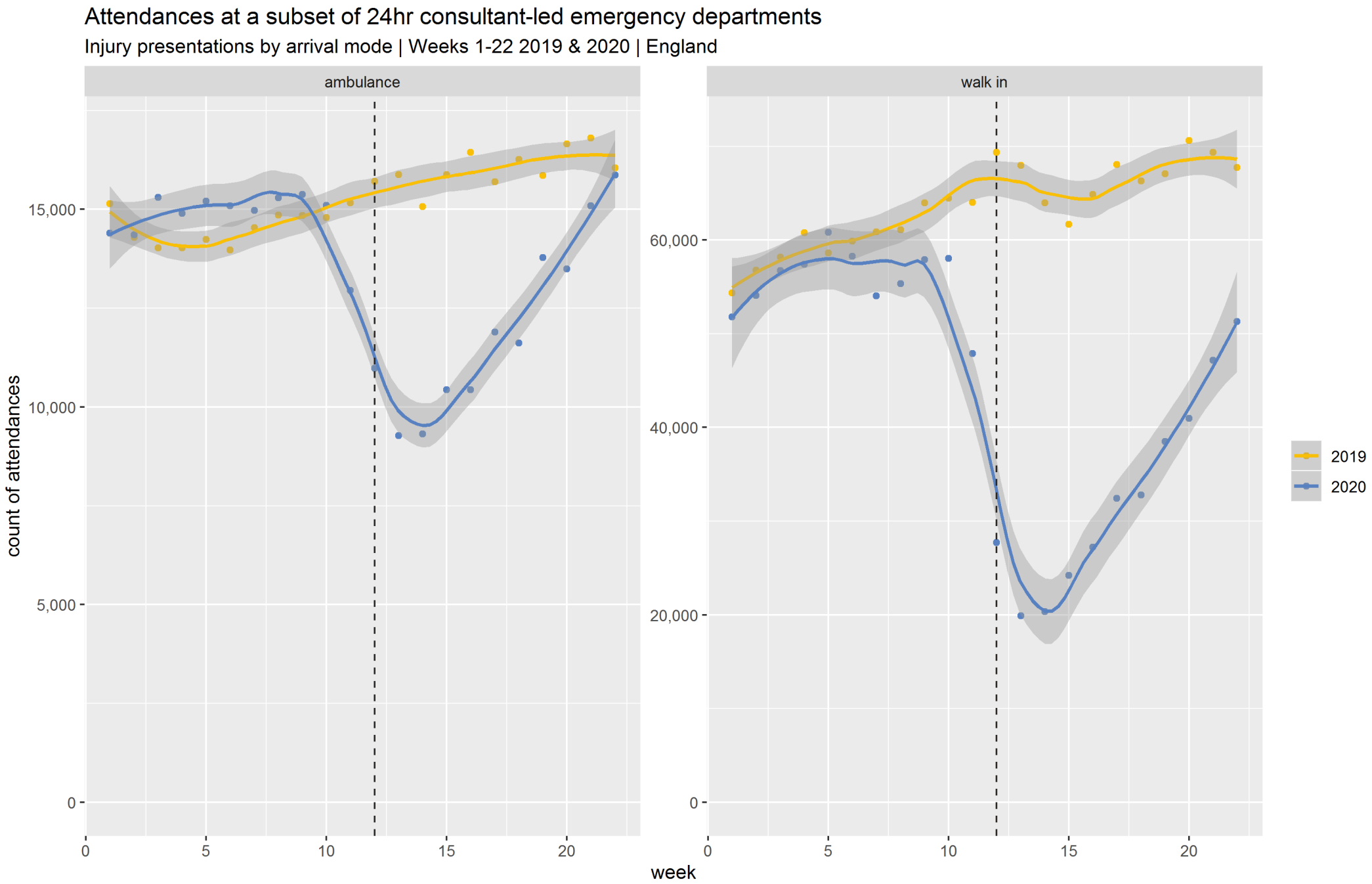
Attendances for Covid19 patients peaked in week 14 and had fallen to approximately one quarter of this rate by week 22.


Attendances at a subset of 24hr consultant-led emergency departments
Weeks 1-22 2019 & 2020 | England
count of attendances
200,000
150,000
100,000
50,000
0
0
5
10
15
20
week
lockdown
2019
2020


Attendances at a subset of 24hr consultant-led emergency departments
by presentation type | Weeks 1-22 2019 & 2020 | England
injury
illness
nothing abnormal detected
diagnosis not recorded
count of attendances
week
2019
2020
0
5,000
10,000
15,000
20,000
25,000
50,000
75,000
100,000
0
5
10
15
20

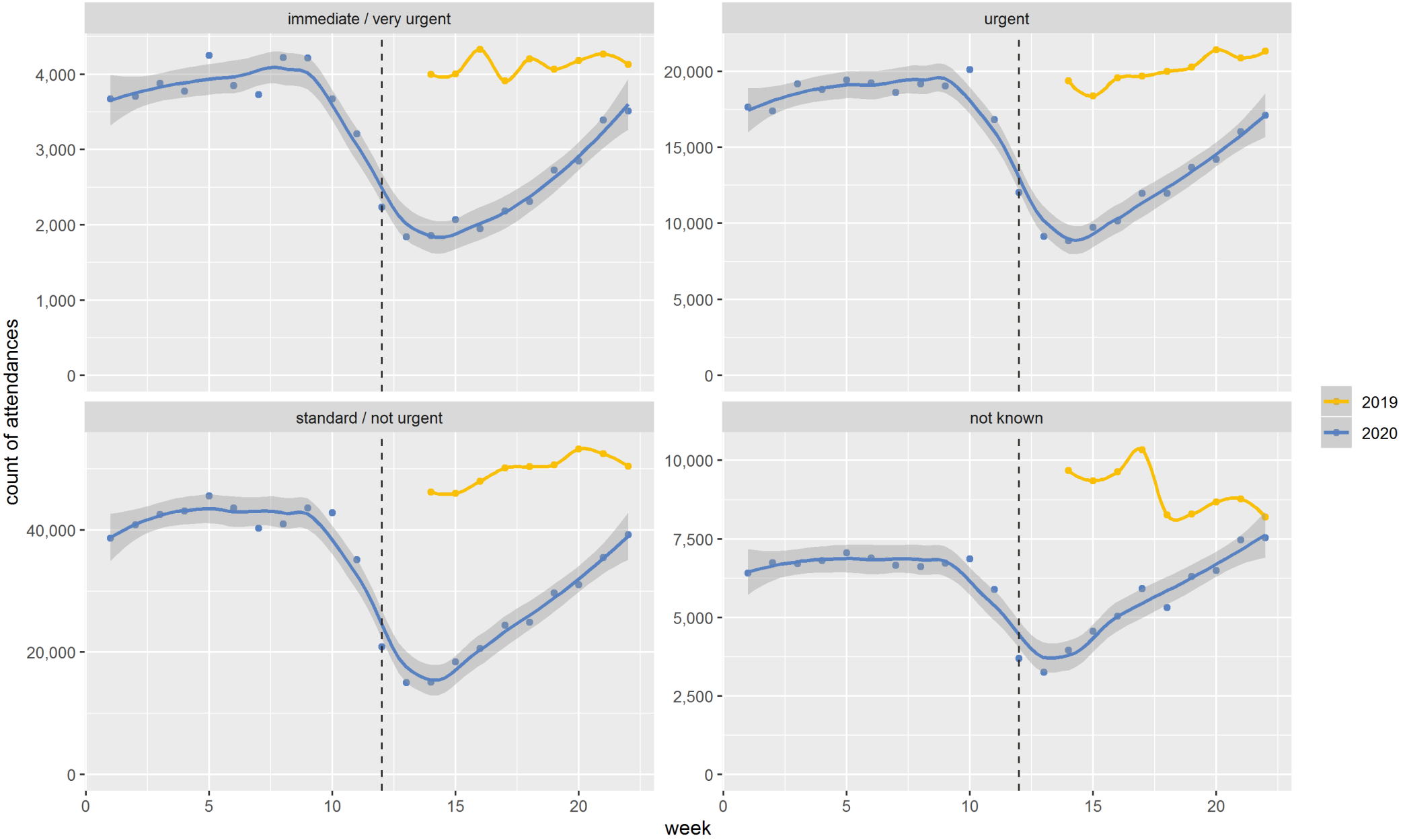
Injury presentations

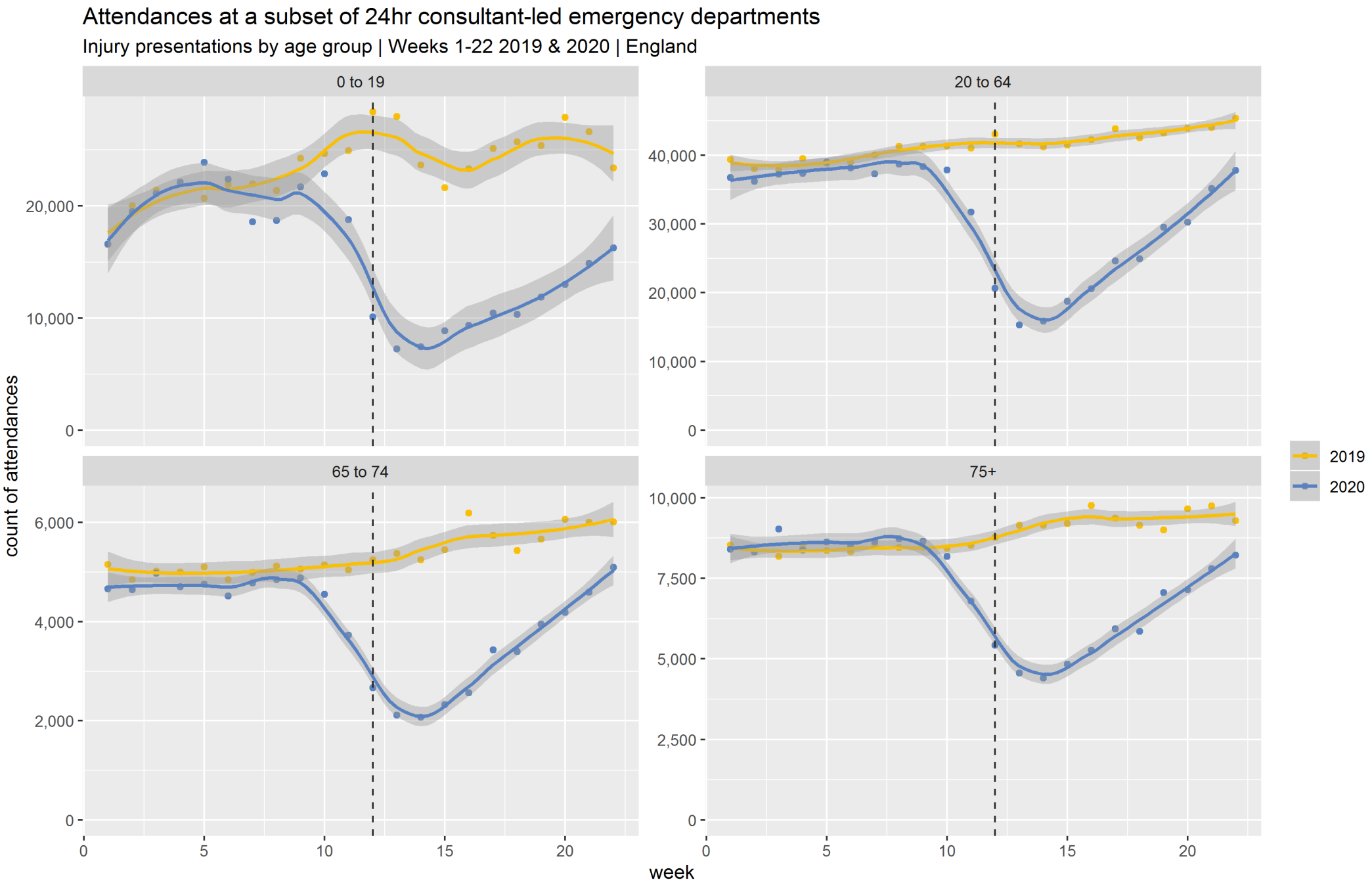

Attendances at a subset of 24hr consultant-led emergency departments
Injury presentations by diagnosis | Weeks 1-22 2019 & 2020 | England
Laceration
Contusion/abrasion
Soft tissue inflammation
Head injury
location/fracture/joint injury/amputati
Sprain/ligament injury
Muscle/tendon injury
Burns and scalds
Foreign body
Poisoning (including overdose)
Visceral injury
Facio-maxillary conditions
Ophthalmological conditions
Other injury
count of attendances
week
2019
2020


Attendances at a subset of 24hr consultant-led emergency departments
Injury presentations by arrival mode | Weeks 1-22 2019 & 2020 | England
ambulance
walk in
count of attendances
15,000
10,000
5,000
0
60,000
40,000
20,000
0
0
5
10
15
20
week
2019
2020

Attendances at a subset of 24hr consultant-led emergency departments

Injury presentations by acuity level | Weeks 1-22 2019 & 2020 | England

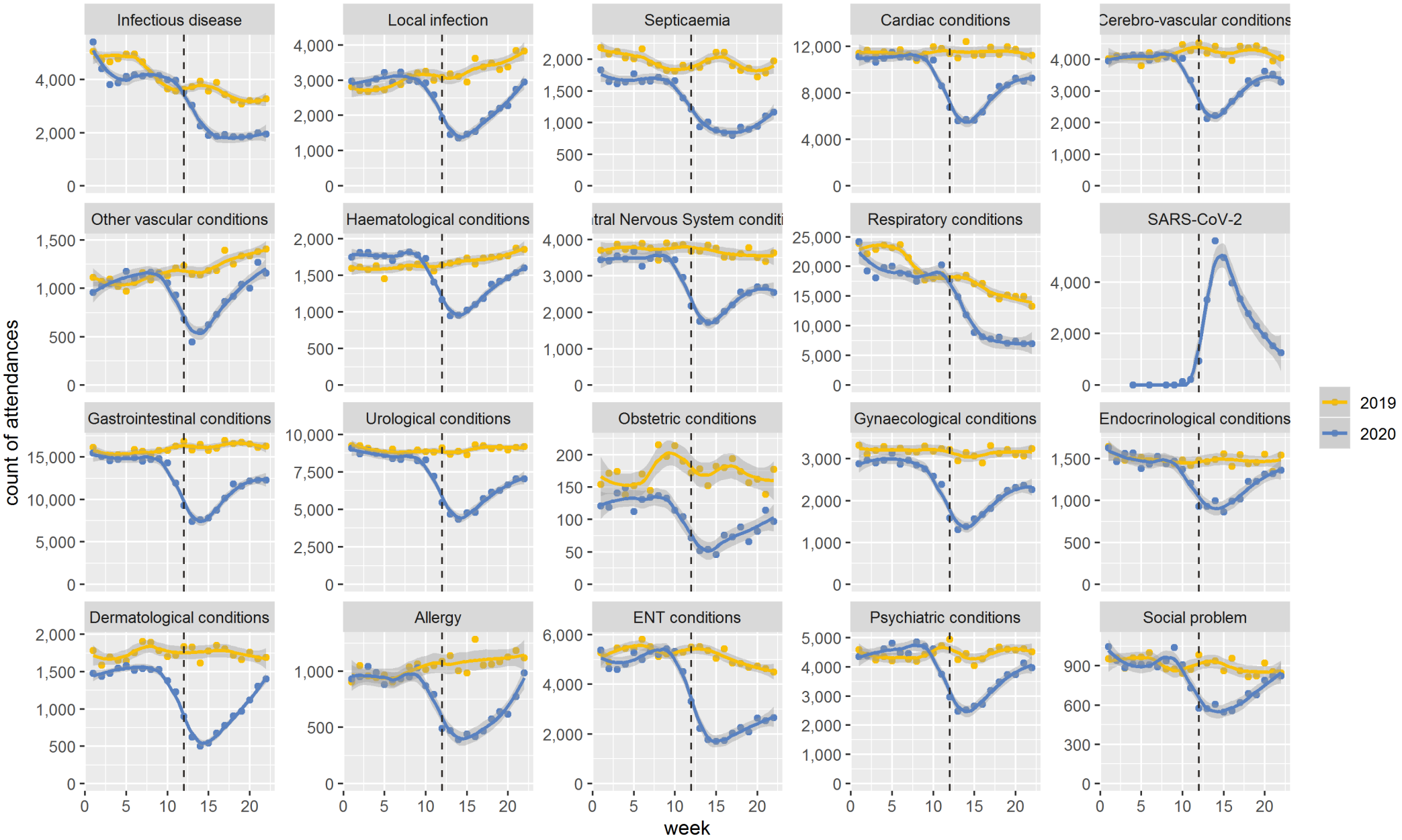


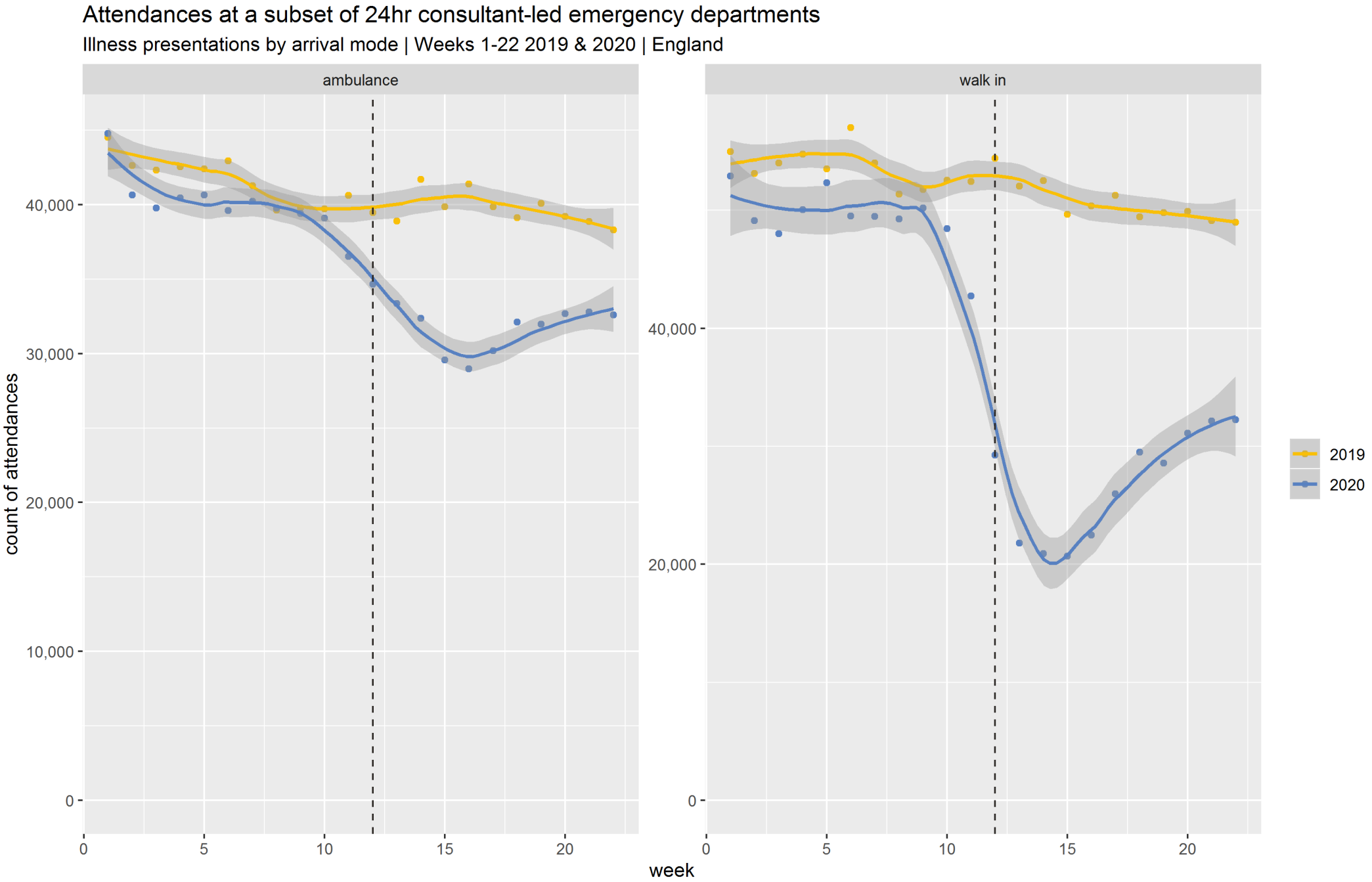

Attendances at a subset of 24hr consultant-led emergency departments
Injury presentations by age group | Weeks 1-22 2019 & 2020 | England
0 to 19
20 to 64
65 to 74
75+
count of attendances
week
2019
2020

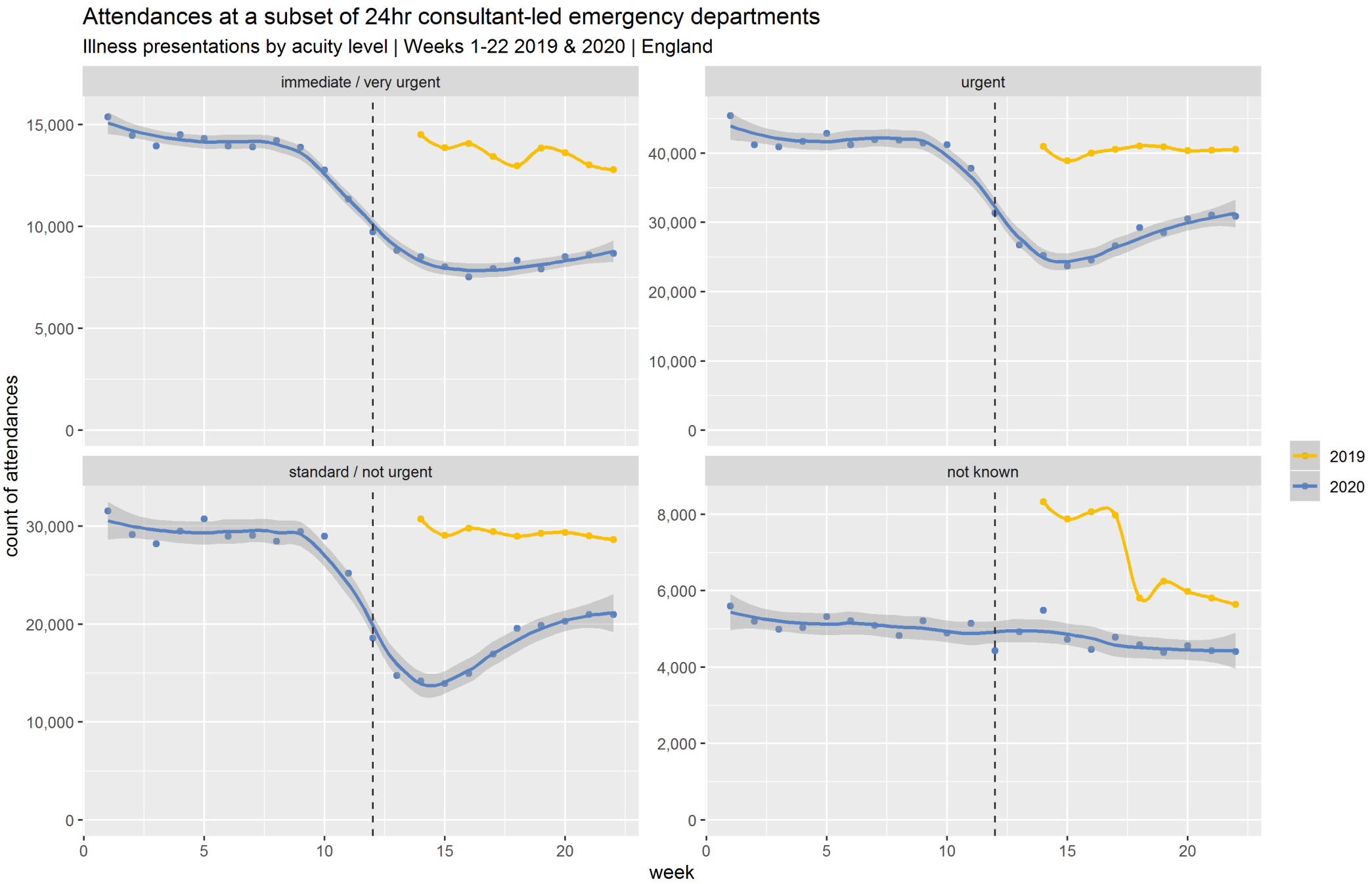
Illness presentations

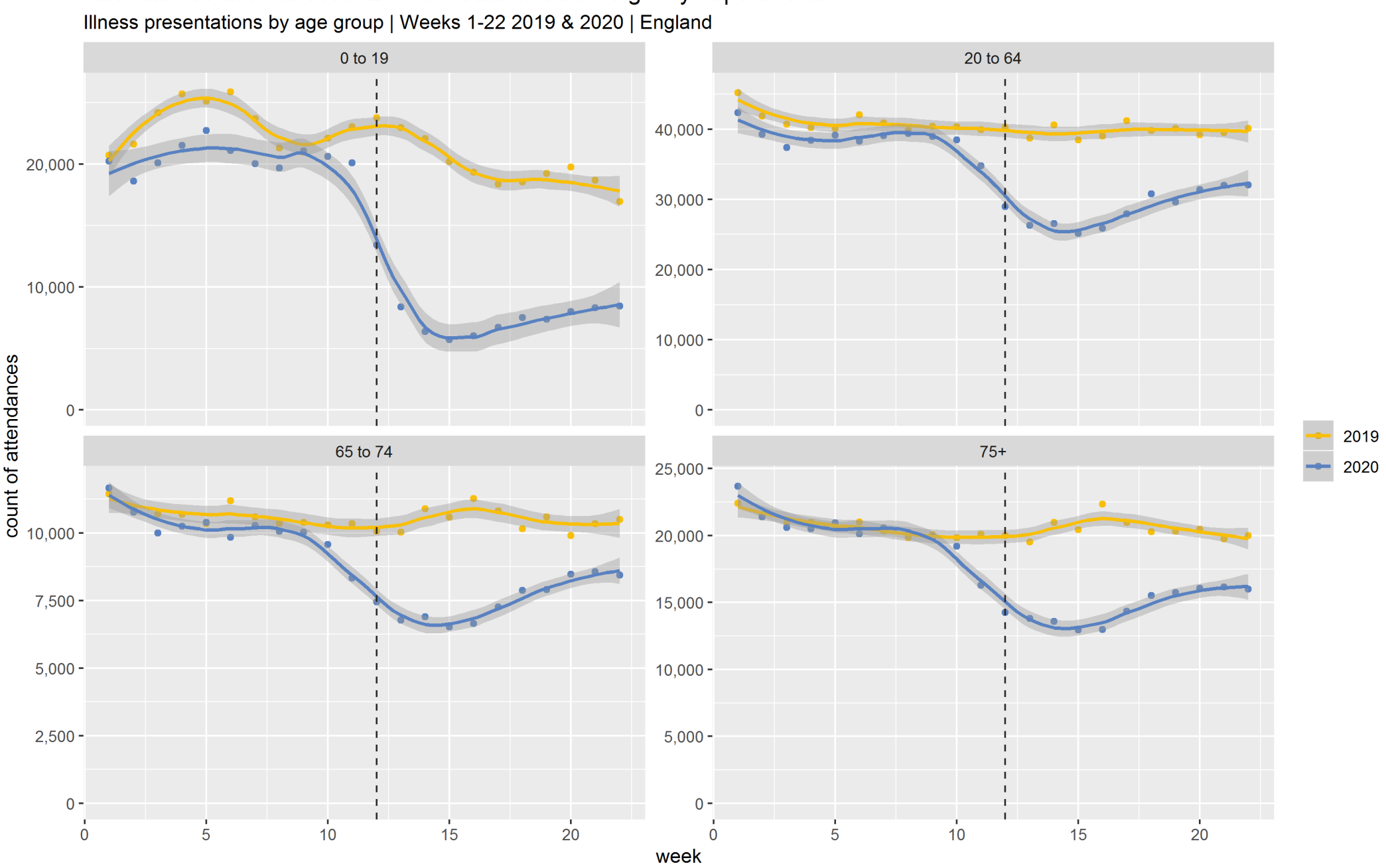
Attendances at a subset of 24hr consultant-led emergency departments

Illness presentations by diagnosis | Weeks 1-22 2019 & 2020 | England




Attendances at a subset of 24hr consultant-led emergency departments
Illness presentations by arrival mode | Weeks 1-22 2019 & 2020 | England
ambulance
walk in
count of attendances
0
10,000
20,000
30,000
40,000
0
5
10
15
20
week
2019
2020

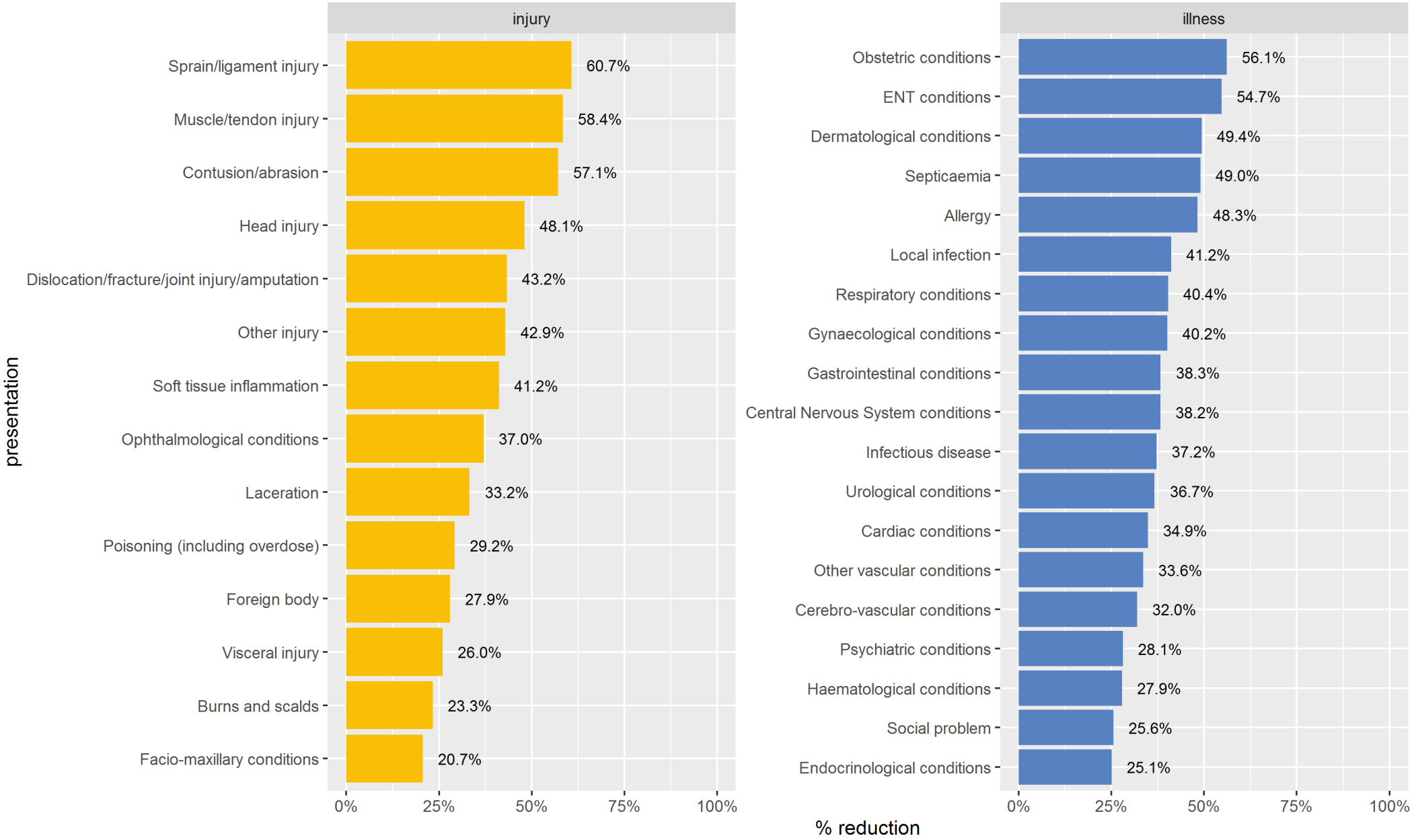

Attendances at a subset of 24hr consultant-led emergency departments
Illness presentations by acuity level | Weeks 1-22 2019 & 2020 | England
immediate / very urgent
urgent
standard / not urgent
not known
count of attendances
week
2019
2020


Attendances at a subset of 24hr consultant-led emergency departments
Illness presentations by age group | Weeks 1-22 2019 & 2020 | England
0 to 19
20 to 64
65 to 74
75+
count of attendances
week
2019
2020

Relative changes

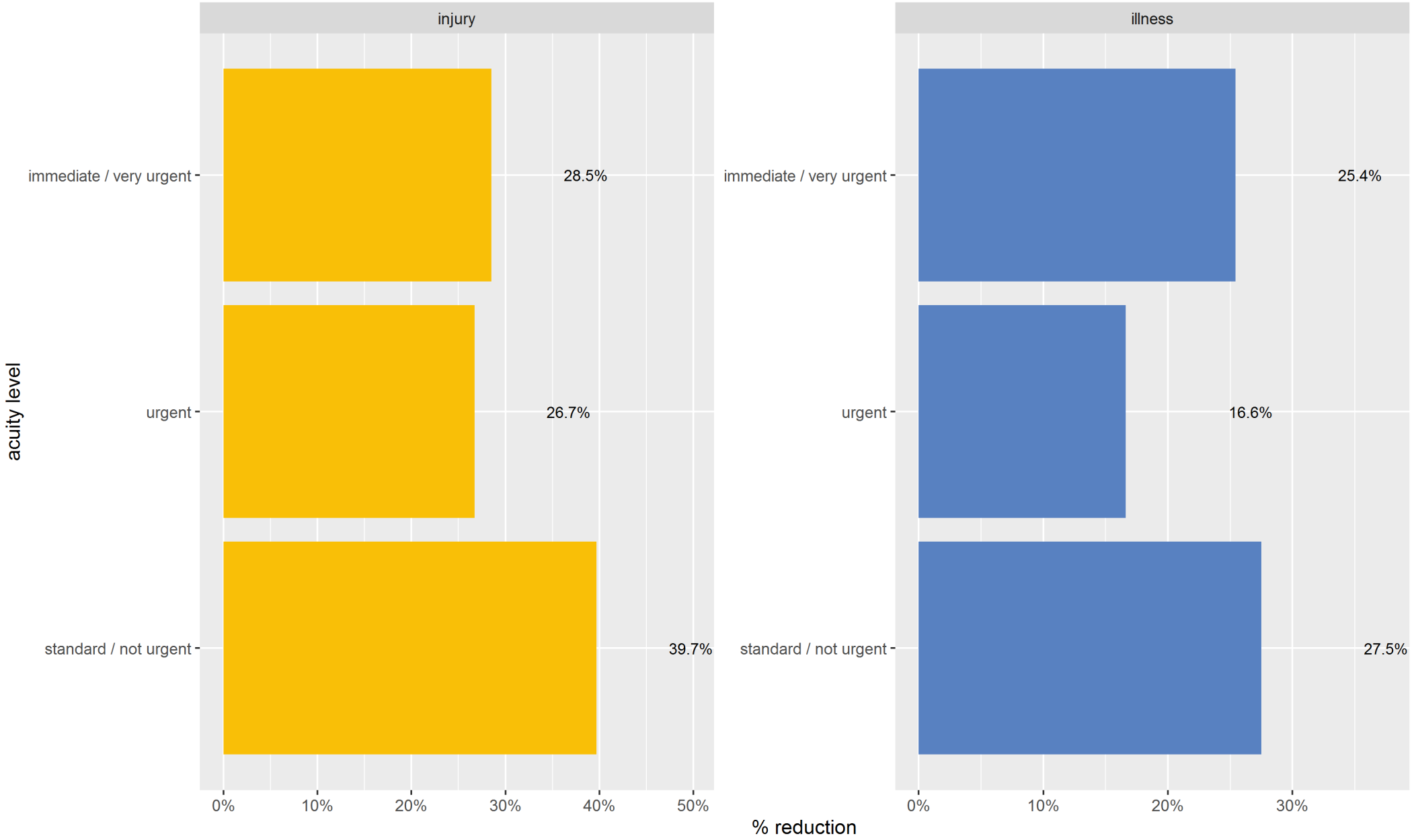
Change in attendances rates at a subset of 24hr consultant-led emergency departments

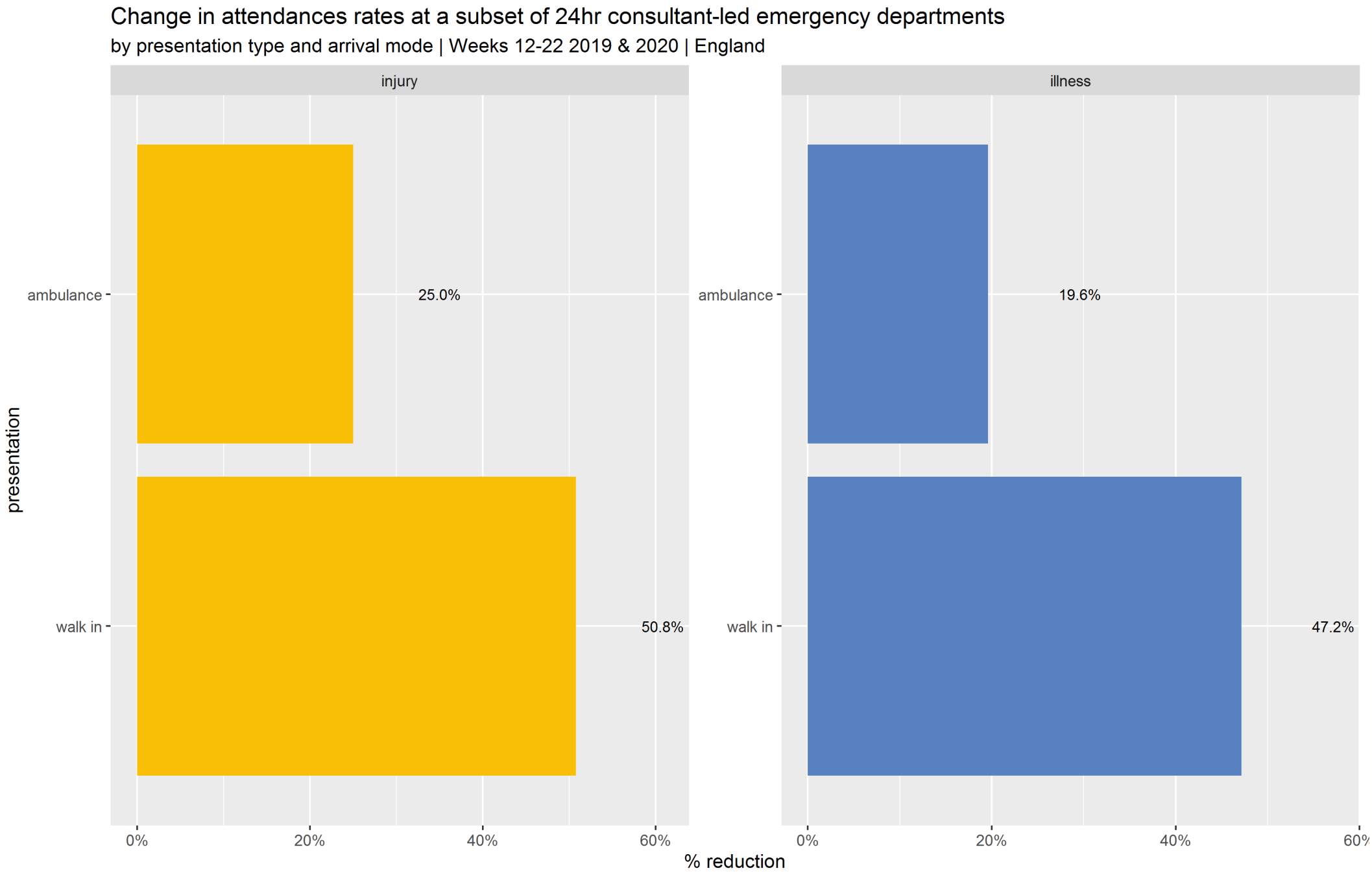
by presentation type and diagnosis | Weeks 12-22 2019 & 2020 | England



Change in attendances rates at a subset of 24hr consultant-led emergency departments

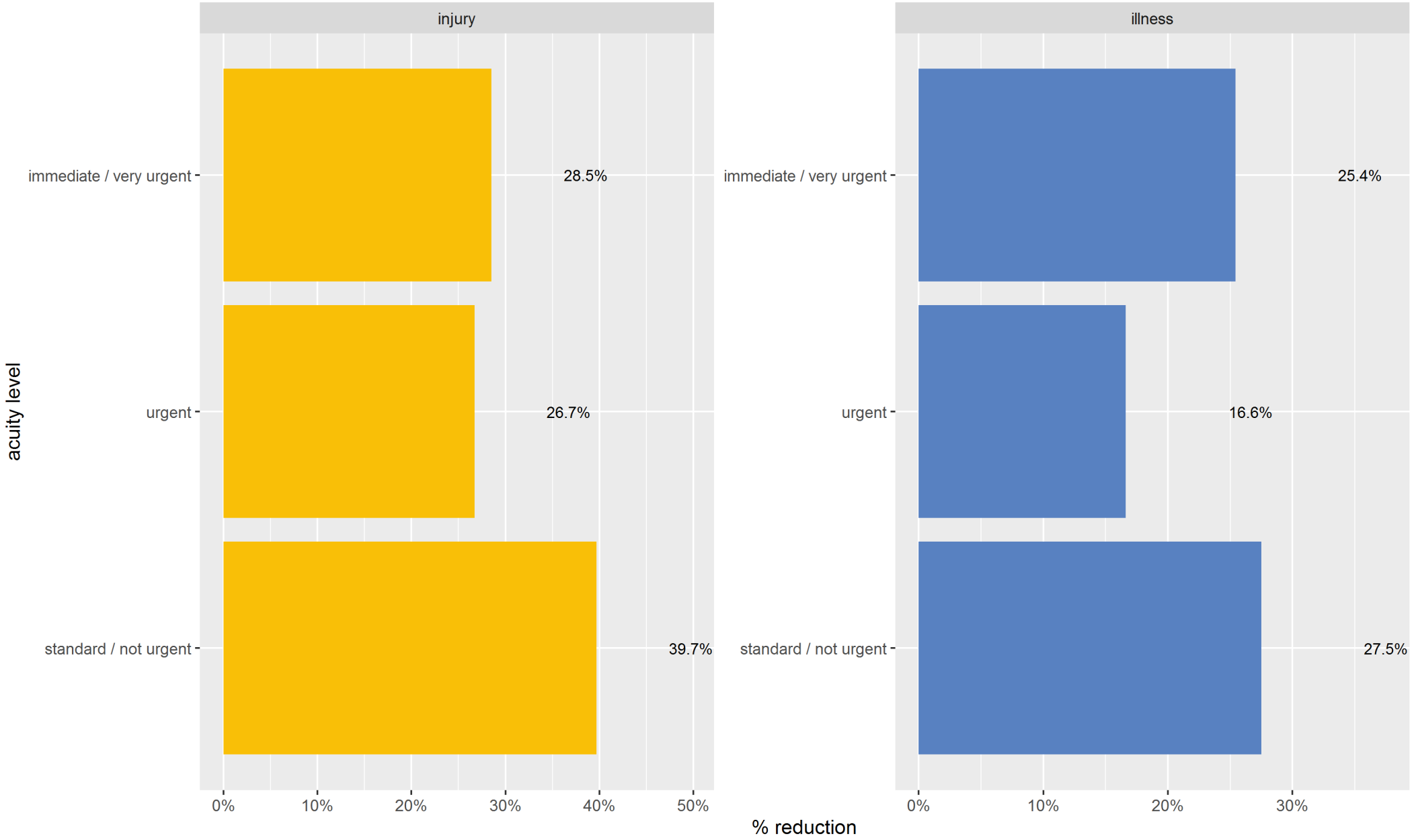
by presentation type and acuity level | Weeks 12-20 2020 vs weeks 2-10 2020 | England

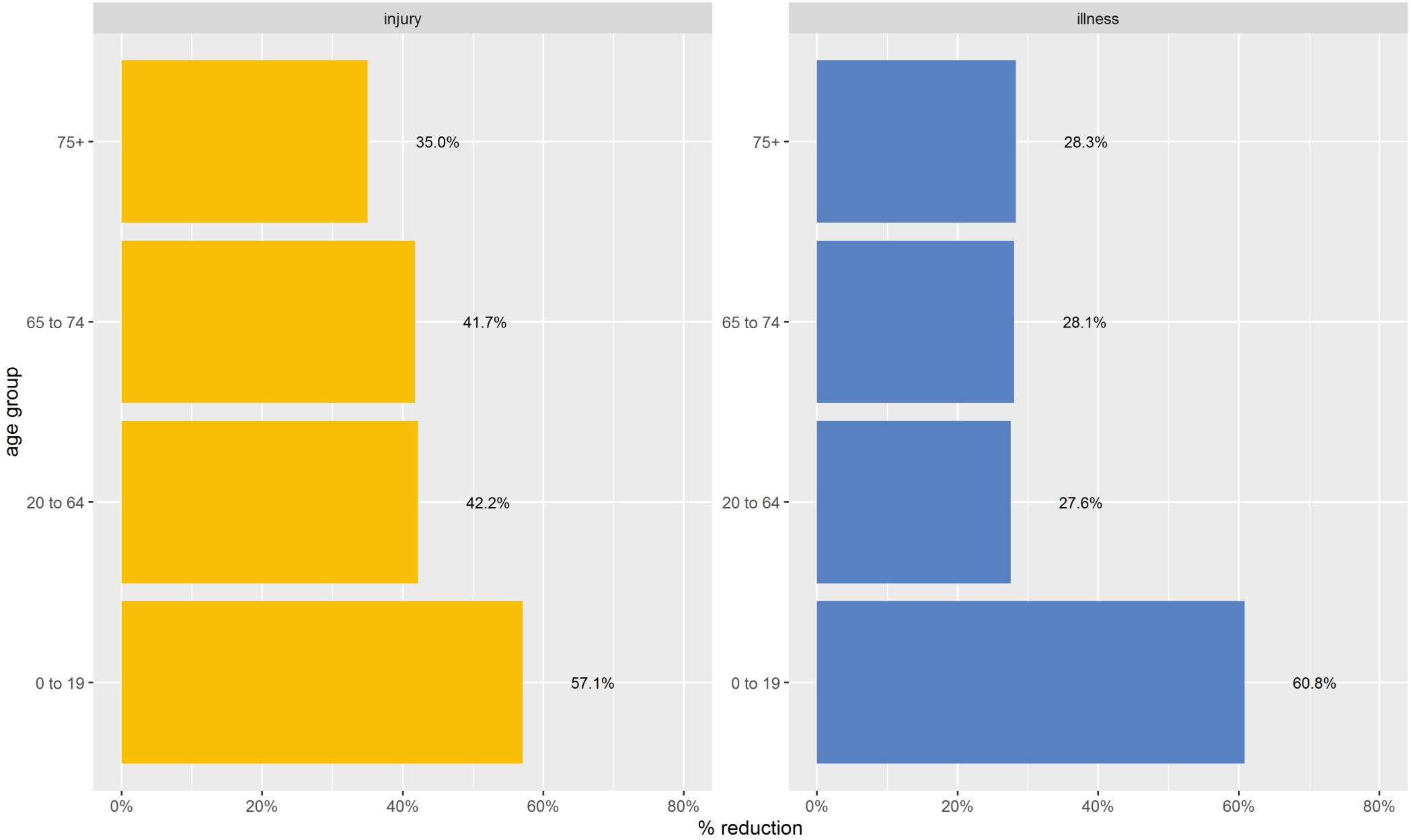



Change in attendances rates at a subset of 24hr consultant-led emergency departments
by presentation type and arrival mode | Weeks 12-22 2019 & 2020 | England
injury
illness
ambulance
walk in
presentation
25.0%
50.8%
19.6%
47.2%
0%
20%
40%
60%
% reduction

Change in attendances rates at a subset of 24hr consultant-led emergency departments

by presentation type and acuity level | Weeks 12-20 2020 vs weeks 2-10 2020 | England




Change in attendances rates at a subset of 24hr consultant-led emergency departments
by presentation type and age group | Weeks 12-22 2019 & 2020 | England
injury
illness
age group
75+
65 to 74
20 to 64
0 to 19
35.0%
41.7%
42.2%
57.1%
28.3%
28.1%
27.6%
60.8%
0%
20%
40%
60%
80%
% reduction

Notes

The data

The data used in this analysis is drawn from the daily ECDS feeds from SUS, supplied by the National Commissioning Data Repository (NCDR).

The charts show data for 45 trusts that have complete data for the period up to week 22 of 2020 and record patient diagnoses at consistently high levels.

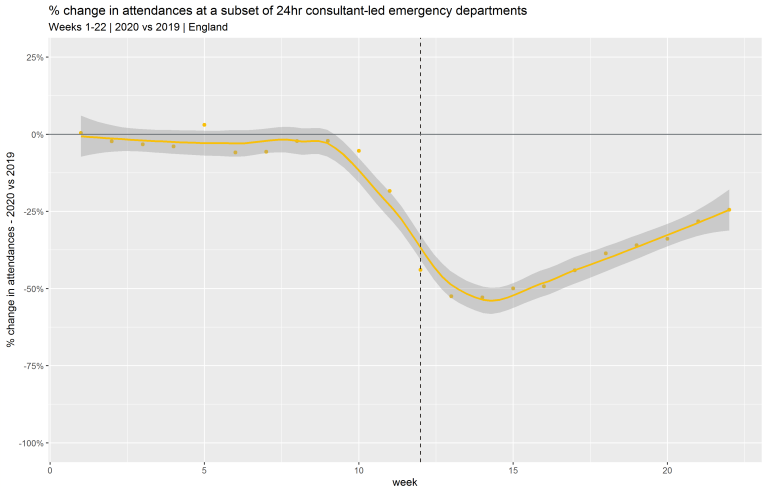
The two additional slides below show;

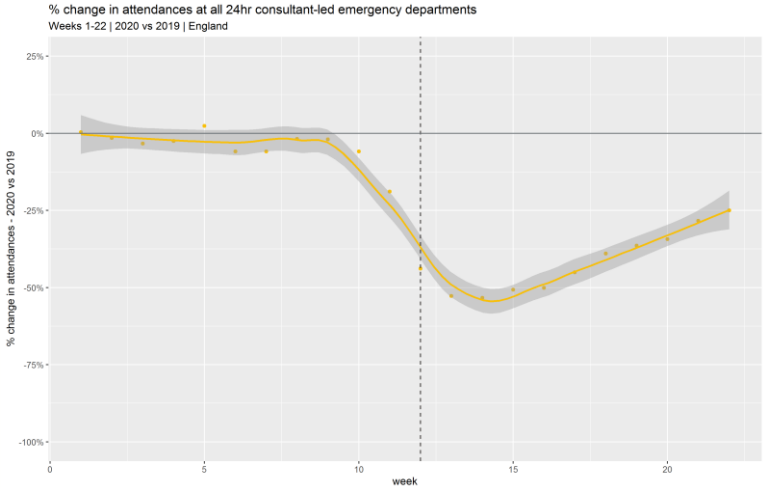
1) A comparison of the characteristics of attendances at the subset of 45 trusts and a wider set of 110 trusts that have complete data up to the end of week 22. The attendance characteristics are broadly similar, although higher proportions of white patients and patients from the most deprived areas are seen in the subset of trusts used in this analysis.

2) Attendance rate trends for the wider set of type 1 departments. This suggests that our sample of providers is not unusual in terms of the trends in attendances.

3) Attendance rate trends for each of the 45 departments. Most providers show similar trends and there are no providers that appear to be disproportionately affecting the aggregate trends.

		Week 13 22 2019			
		providers used in this analysis n = 45		all providers with data to week 22 n = 110	
grouping	sub-group	attendances	%	attendances	%
total		2,121,963		6,300,478	
sex	female	1,075,779	50.7%	3,190,574	50.6%
	male	1,046,013	49.3%	3,090,504	49.1%
	not known	171	0.0%	19,400	0.3%
age group	0	57,766	2.7%	184,674	2.9%
	1 to 4	147,044	6.9%	436,499	6.9%
	5 to 9	103,659	4.9%	301,621	4.8%
	10 to 14	109,789	5.2%	309,071	4.9%
	15 to 19	117,086	5.5%	338,863	5.4%
	20 to 64	1,044,635	49.2%	3,166,977	50.3%
	65 to 74	193,905	9.1%	563,145	8.9%
	75+	348,079	16.4%	999,628	15.9%
ethnic group	White	1,648,828	77.7%	4,626,532	73.4%
	Mixed	35,903	1.7%	111,141	1.8%
	Asian or Asian British	129,502	6.1%	444,974	7.1%
	Black or Black British	54,227	2.6%	239,959	3.8%
	Other ethnic groups	44,954	2.1%	205,124	3.3%
	not stated / not given	208,549	9.8%	672,748	10.7%
IMD2015 decile	1 - most deprived	382,559	18.0%	909,700	14.4%
	2	280,343	13.2%	805,968	12.8%
	3	237,481	11.2%	734,074	11.7%
	4	222,035	10.5%	656,152	10.4%
	5	199,180	9.4%	602,209	9.6%
	6	182,130	8.6%	572,320	9.1%
	7	175,157	8.3%	534,428	8.5%
	8	161,354	7.6%	510,911	8.1%
	9	144,624	6.8%	478,706	7.6%
	10 - least deprived	121,169	5.7%	431,732	6.9%
	not known	15,931	0.8%	64,278	1.0%
Urbanicity	urban	1,783,295	84.0%	5,402,978	85.8%
	rural	326,413	15.4%	842,024	13.4%
	not known	12,255	0.6%	55,476	0.9%





Attendances at a subset of 24hr consultant-led emergency departments

Weeks 1-22 2019 & 2020 | England

For questions relating to this analysis, please contact:

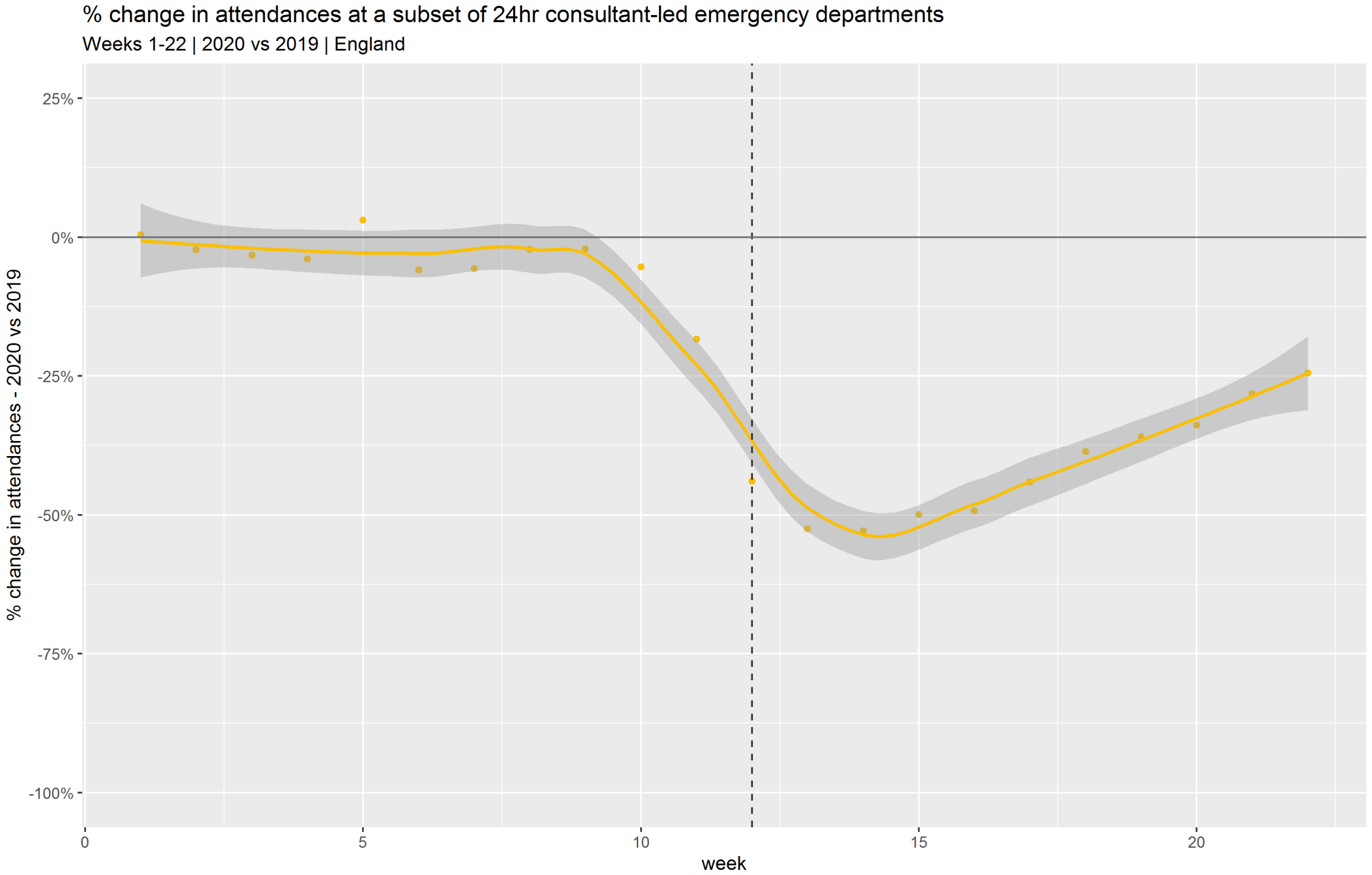
Steven Wyatt
Head of Analytics, The Strategy Unit
swyatt@nhs.net

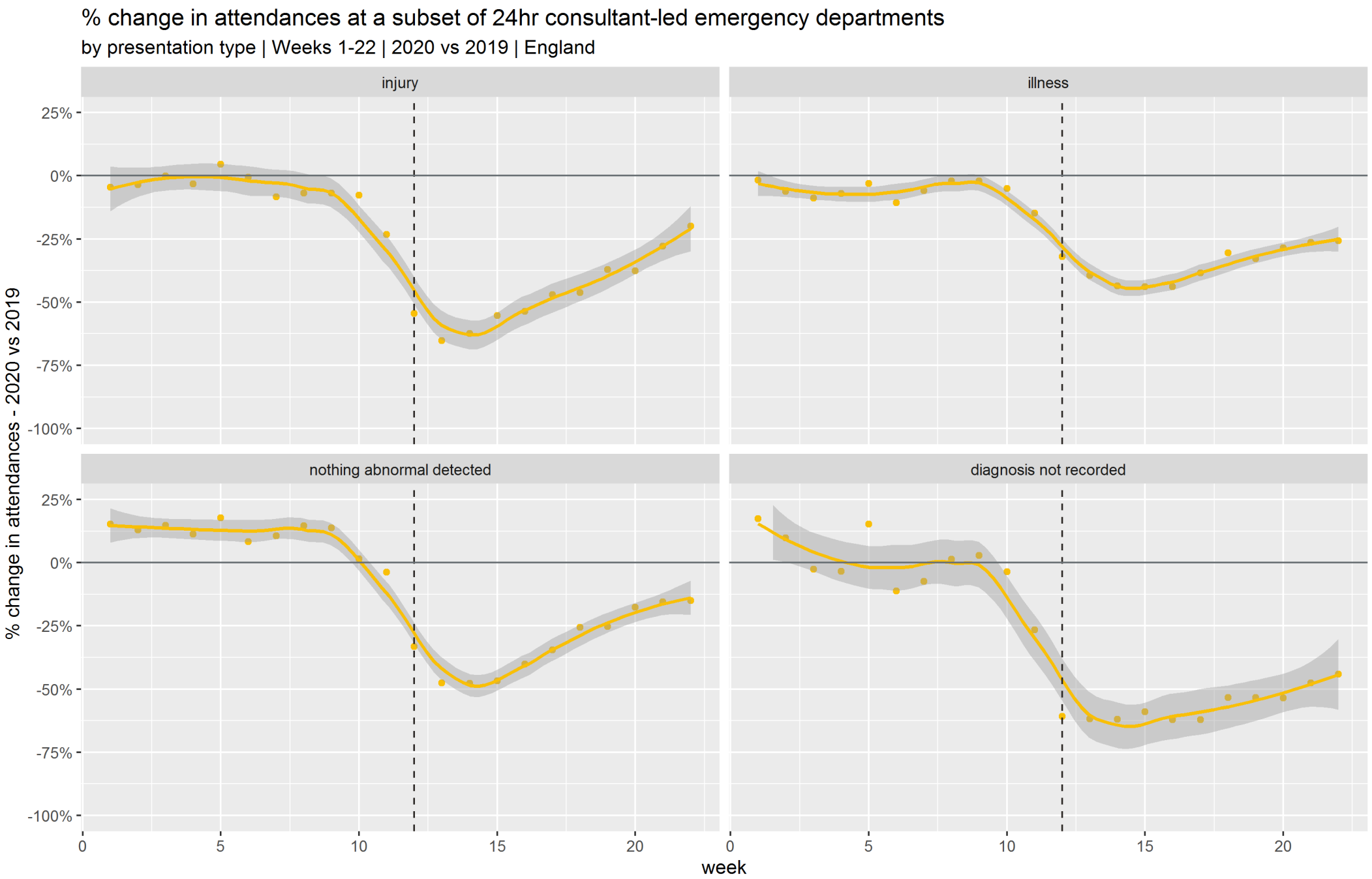
Leading research, analysis and change from within the NHS.

W: strategyunit.co.uk

Twitter: @Strategy_Unit

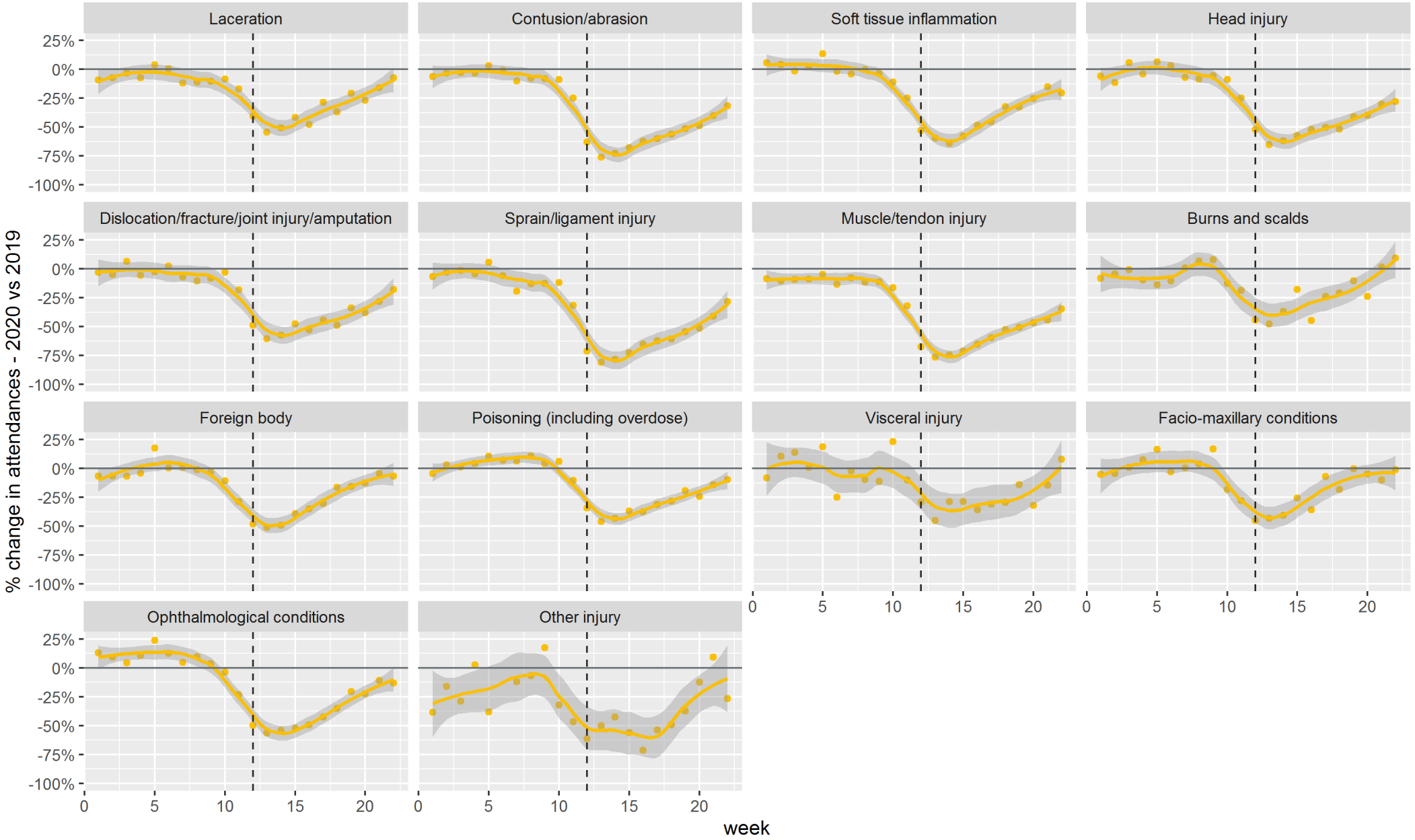
Additional charts


% change in attendances at a subset of 24hr consultant-led emergency departments
Weeks 1-22 | 2020 vs 2019 | England
25%
0%
-25%
-50%
-75%
-100%
% change in attendances - 2020 vs 2019
0
5
10
15
20
week


% change in attendances at a subset of 24hr consultant-led emergency departments
by presentation type | Weeks 1-22 | 2020 vs 2019 | England
injury
illness
nothing abnormal detected
diagnosis not recorded
% change in attendances - 2020 vs 2019
25%
0%
-25%
-50%
-75%
-100%
0
5
10
15
20
week

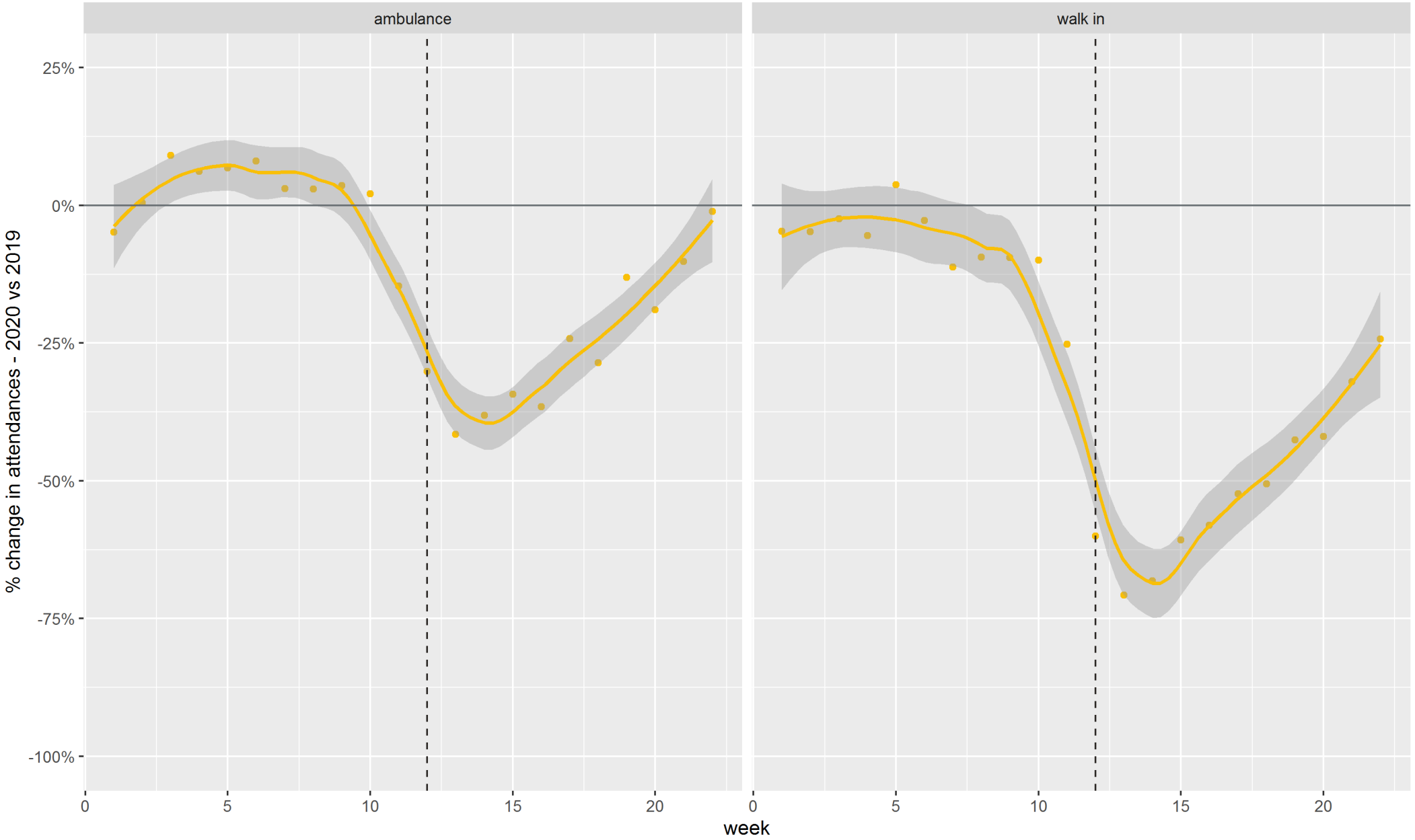
% change in attendances at a subset of 24hr consultant-led emergency departments

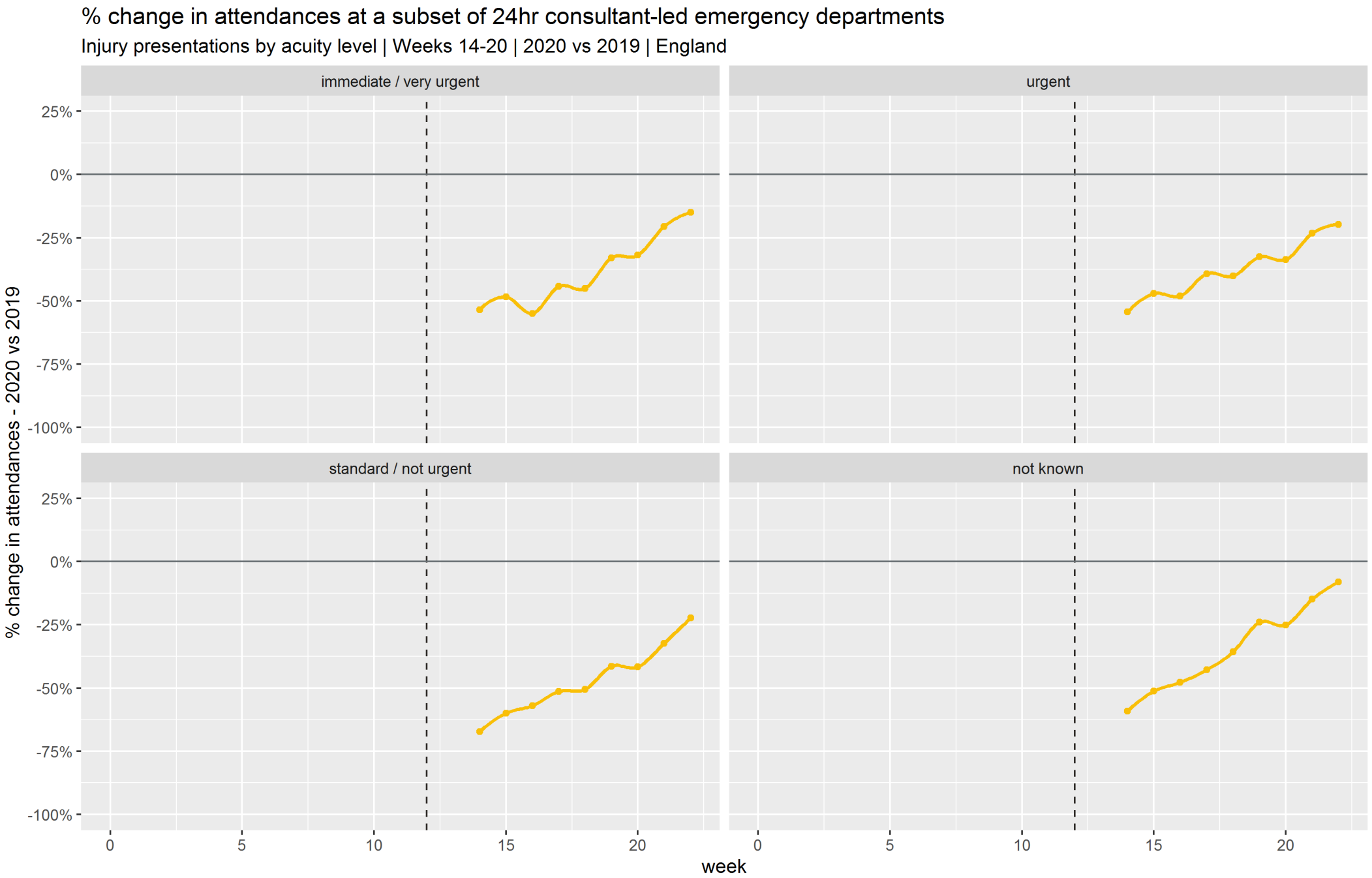
Injury presentations by diagnosis | Weeks 1-22 | 2020 vs 2019 | England

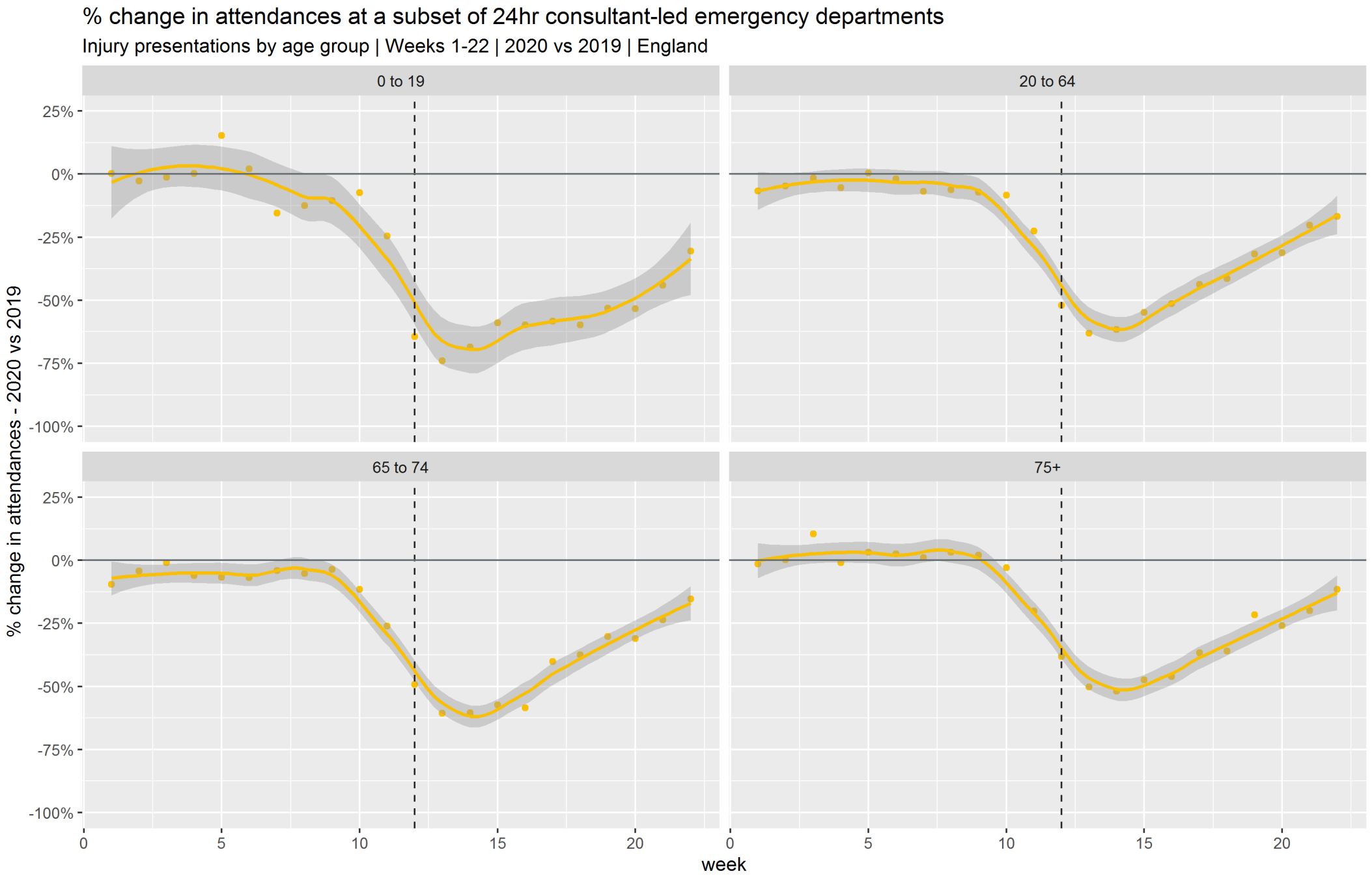


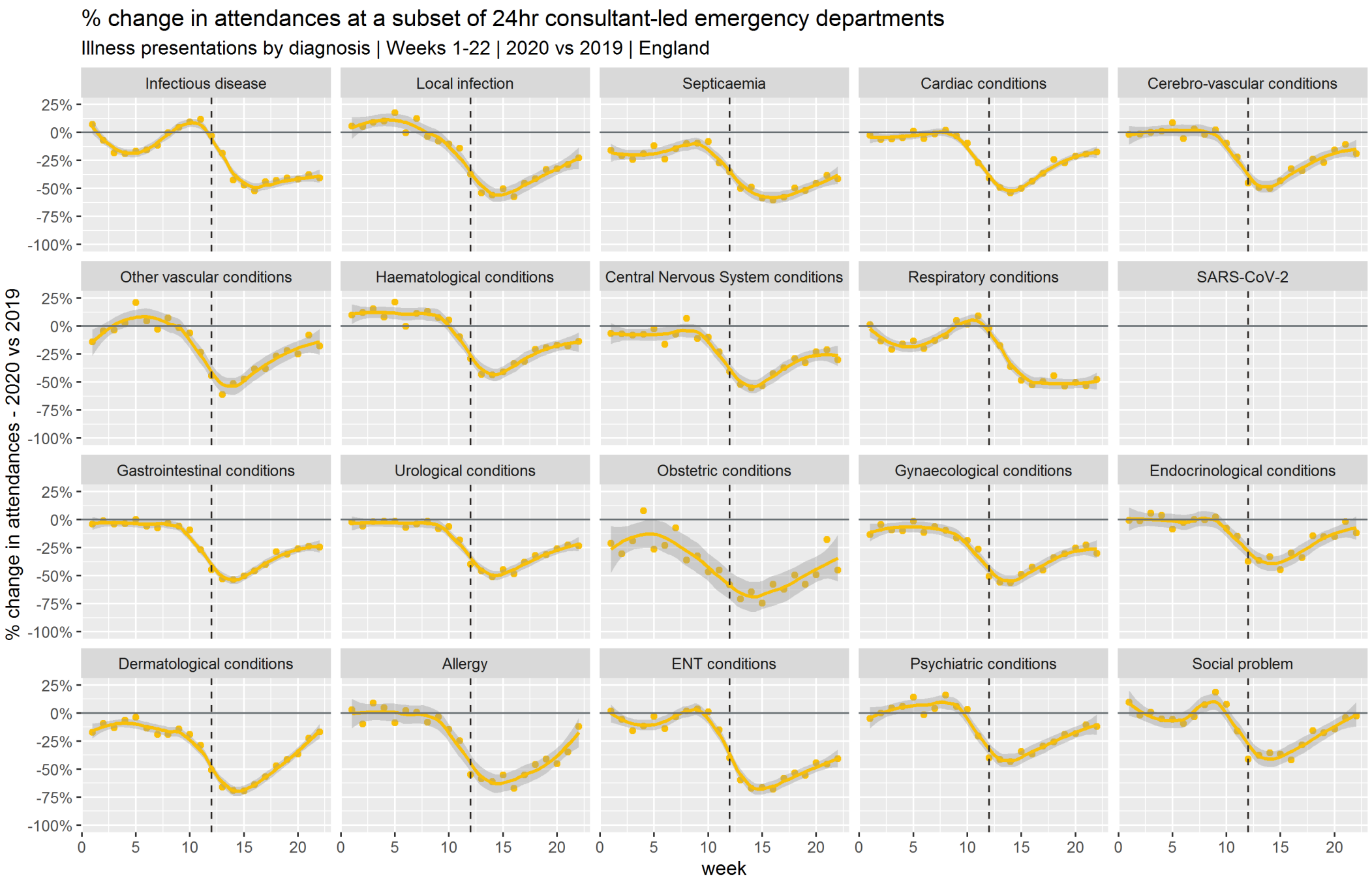
% change in attendances at a subset of 24hr consultant-led emergency departments

Injury presentations by arrival mode | Weeks 14-20 | 2020 vs 2019 | England



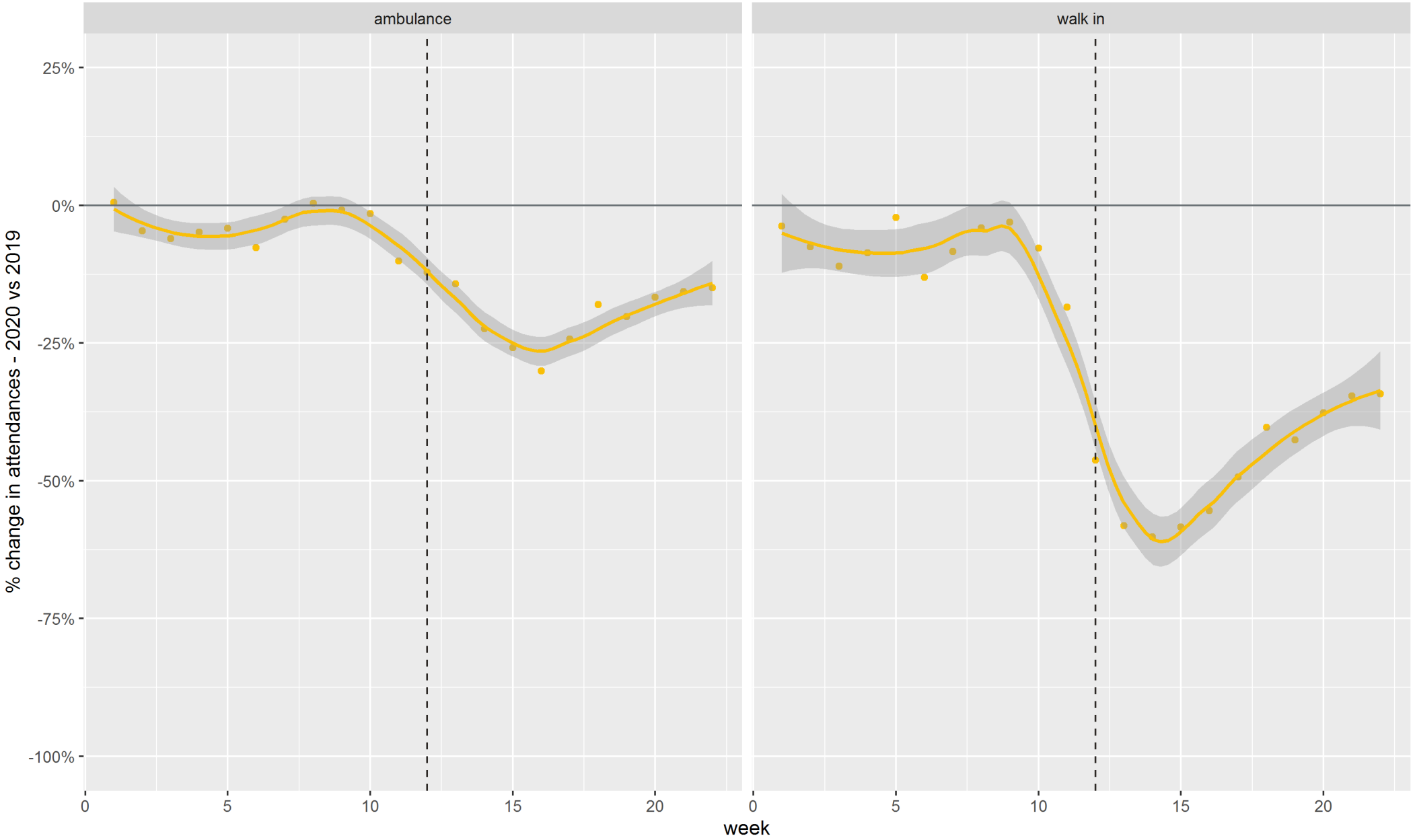

% change in attendances at a subset of 24hr consultant-led emergency departments
Injury presentations by acuity level | Weeks 14-20 | 2020 vs 2019 | England
immediate / very urgent
urgent
standard / not urgent
not known
% change in attendances - 2020 vs 2019
25%
0%
-25%
-50%
-75%
-100%
0
5
10
15
20
week

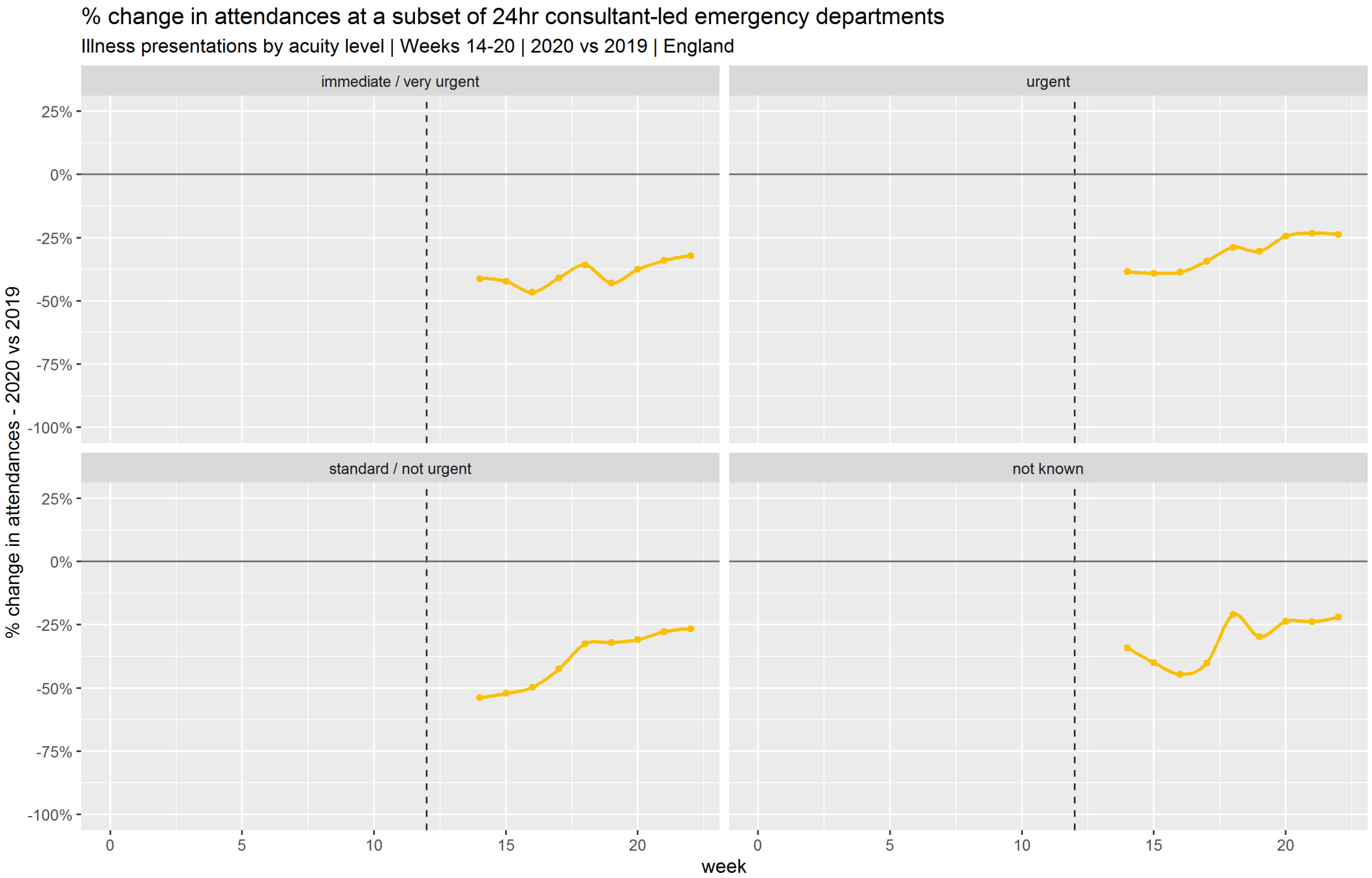

% change in attendances at a subset of 24hr consultant-led emergency departments
Injury presentations by age group | Weeks 1-22 | 2020 vs 2019 | England
0 to 19
20 to 64
65 to 74
75+
25%
0%
-25%
-50%
-75%
-100%
% change in attendances - 2020 vs 2019
0
5
10
15
20
week

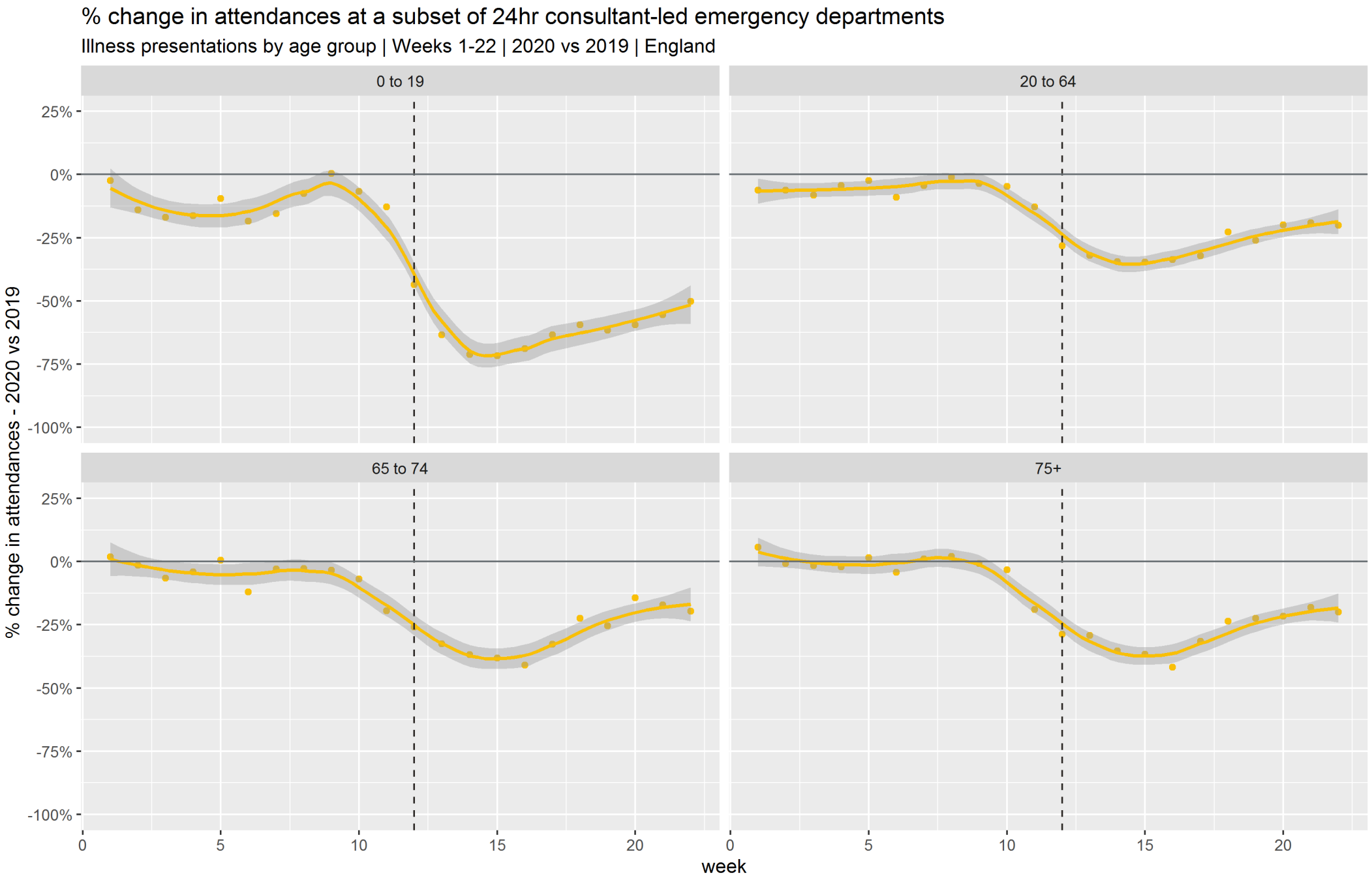

% change in attendances at a subset of 24hr consultant-led emergency departments
Illness presentations by diagnosis | Weeks 1-22 | 2020 vs 2019 | England
Infectious disease
Local infection
Septicaemia
Cardiac conditions
Cerebro-vascular conditions
Other vascular conditions
Haematological conditions
Central Nervous System conditions
Respiratory conditions
SARS-CoV-2
Gastrointestinal conditions
Urological conditions
Obstetric conditions
Gynaecological conditions
Endocrinological conditions
Dermatological conditions
Allergy
ENT conditions
Psychiatric conditions
Social problem
25%
0%
-25%
-50%
-75%
-100%
0
5
10
15
20
week
% change in attendances - 2020 vs 2019

% change in attendances at a subset of 24hr consultant-led emergency departments

Illness presentations by arrival mode | Weeks 14-20 | 2020 vs 2019 | England




% change in attendances at a subset of 24hr consultant-led emergency departments
Illness presentations by acuity level | Weeks 14-20 | 2020 vs 2019 | England
immediate / very urgent
urgent
standard / not urgent
not known
% change in attendances - 2020 vs 2019
25%
0%
-25%
-50%
-75%
-100%
0
5
10
15
20
week


% change in attendances at a subset of 24hr consultant-led emergency departments
Illness presentations by age group | Weeks 1-22 | 2020 vs 2019 | England
0 to 19
20 to 64
65 to 74
75+
25%
0%
-25%
-50%
-75%
-100%
% change in attendances - 2020 vs 2019
0
5
10
15
20
week