

Yellow-fever-related queries to the UK's national pre-travel advice line, 2019-2023:

Rising clinical complexity and a growing role for pharmacies



NECTM 9: Copenhagen
24 May 2024

Trent Herdman, Sanch Kanagarajah,
Alexandra Stillwell, Hilary Simons, Dipti Patel

1

Declarations



No conflicts of interest

NaTHNaC

2



NECTM9: Background

Commission on Human Medicines

2019 review of serious and fatal reactions to the YF vaccine.

Recommendations:

- Specific training for all vaccine providers.
- Standardised checklist for medical history.
- Heightened risk assessment age 60+.
- No administration with thymus dysfunction, immunosuppressing/immunomodulating drugs, or severe reaction in first-degree family member.
- Strengthened informed consent and incident reporting.

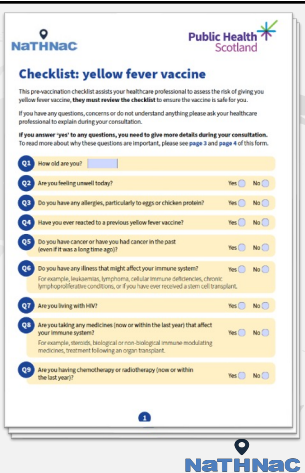
NaTHNaC

3

NECTM9: Background

NaTHNaC and Yellow Fever

- Key Service Areas:
 - Yellow fever vaccination programme
 - Education
 - Communication and information services
 - International health surveillance
 - Partnerships and collaboration
 - Advisory services including clinical advice line



TRAVEL HEALTH PRO

YELLOW FEVER ZONE



NaTHNaC

4

NECTM9: Background

NaTHNaC Pre-Travel Health Advice Line

- Supporting Health Professionals in the UK.
- Staffed by Travel Nurse Specialist Advisors.
- Supplementing information at Travel Health Pro and Yellow Fever Zone websites.
- For complex travellers and complex itineraries.
- 3,000-6,000 calls a year.

5

NECTM9: Background



Yellow Fever Guidance

↓

Calls for Pre-Travel Advice



6

NECTM9: Background



Yellow Fever Guidance

STAY HOME ► PROTECT THE NHS ► SAVE LIVES

↓

Calls for Pre-Travel Advice

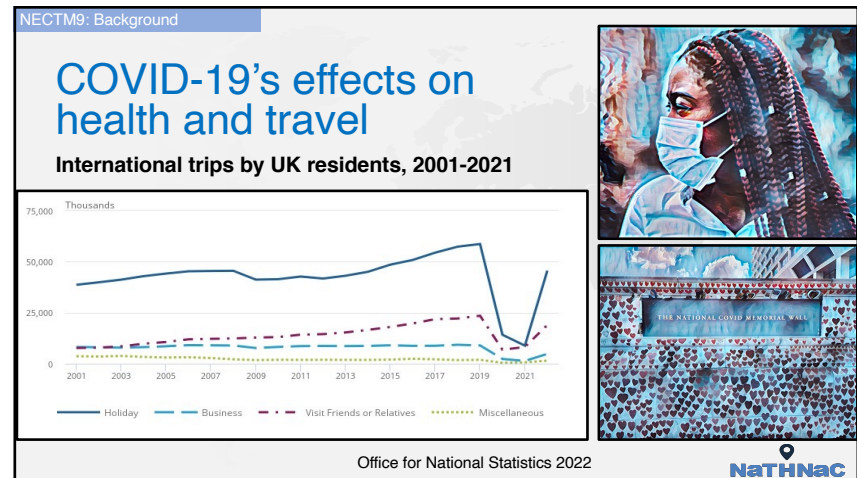


7

NECTM9: Background


COVID-19's effects on health and travel

International trips by UK residents, 2001-2021



Year	Holiday (Thousands)	Business (Thousands)	Visit Friends or Relatives (Thousands)	Miscellaneous (Thousands)
2001	40,000	10,000	5,000	2,000
2003	42,000	10,000	6,000	2,000
2005	45,000	10,000	7,000	2,000
2007	45,000	10,000	8,000	2,000
2009	42,000	10,000	9,000	2,000
2011	42,000	10,000	10,000	2,000
2013	45,000	10,000	11,000	2,000
2015	48,000	10,000	12,000	2,000
2017	50,000	10,000	13,000	2,000
2019	55,000	10,000	14,000	2,000
2020	10,000	5,000	15,000	2,000
2021	15,000	5,000	16,000	2,000

Office for National Statistics 2022



8

Research to improve the advice service



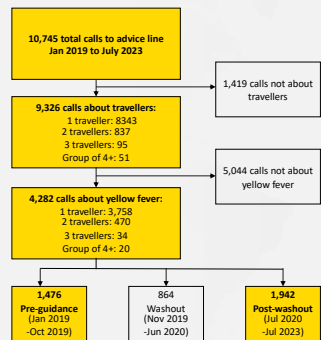
- Effective pre-travel advice depends on an understanding of the needs of providers and travellers.
- Both the 2019 national guidance and the COVID-19 pandemic have impacted practice.
- To improve advice services, we asked how yellow fever queries to the advice line have changed.

Exploring yellow-fever-related pre-travel calls



- Recorded each telephone query.
- Coded each call's purpose, setting, travellers, and itinerary.
- Described yellow fever calls 2019-2023:
 - **Pre-Guidance** (Jan 2019-Oct 2019);
 - **Washout period** (Nov 2019-Jun 2020);
 - **Post-Guidance, Post-COVID-19 travel restrictions** (Jul 2020-Jul 2023).
- Analysed changes from Pre- to Post-period.

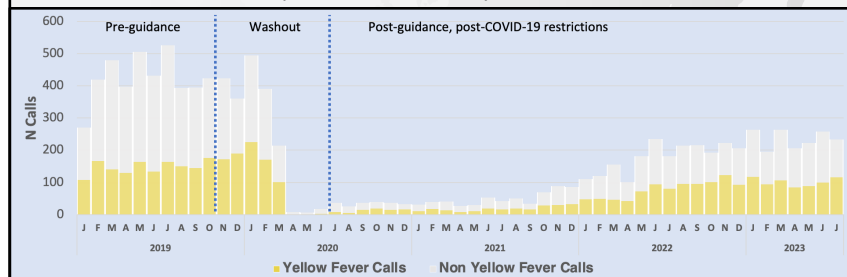
Exploring yellow-fever-related pre-travel calls

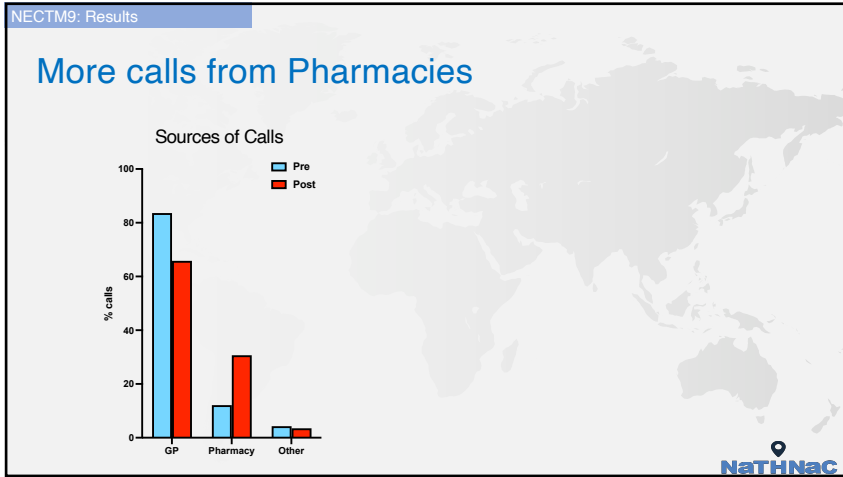


- Recorded each telephone query.
- Coded each practice, travellers, and itineraries coded.
- Described yellow fever calls 2019-2023:
 - **Pre-Guidance** (Jan 2019-Oct 2019);
 - **Washout period** (Nov 2019-Jun 2020);
 - **Post-Guidance, Post-COVID-19 travel restrictions** (Jul 2020-Jul 2023).
- Analysed changes from Pre- to Post-period.

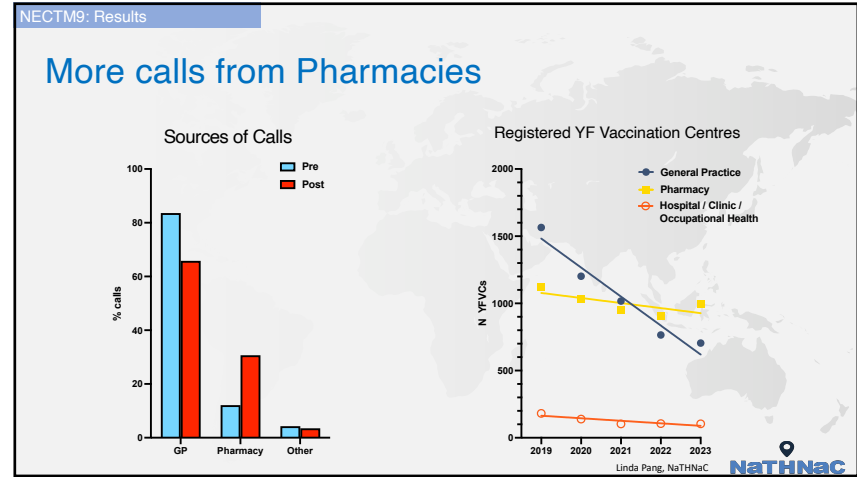
Dramatic shifts in demand through the Pandemic

Calls to the pre-travel advice line per month: 2019-2023

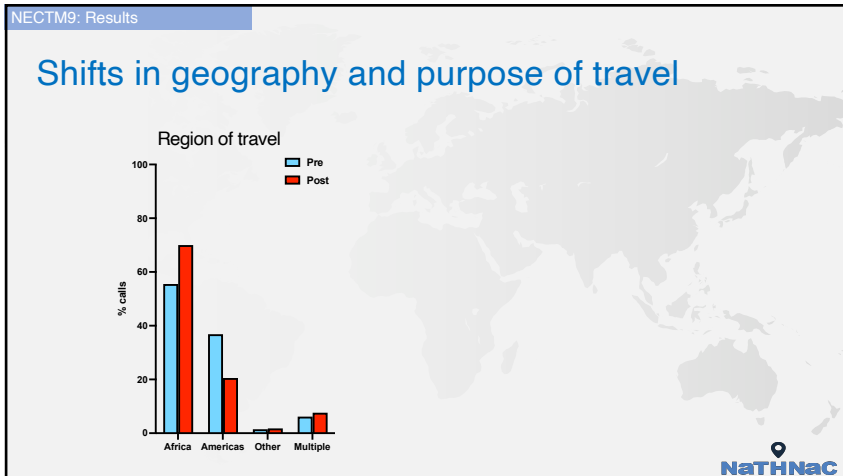




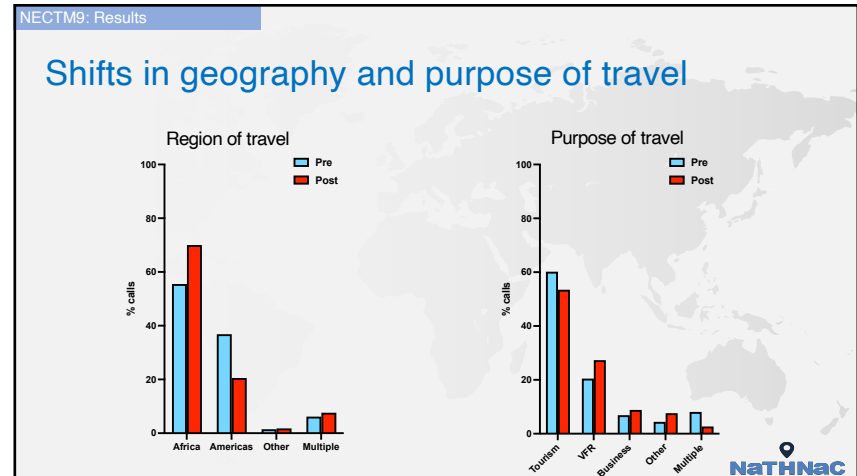
13



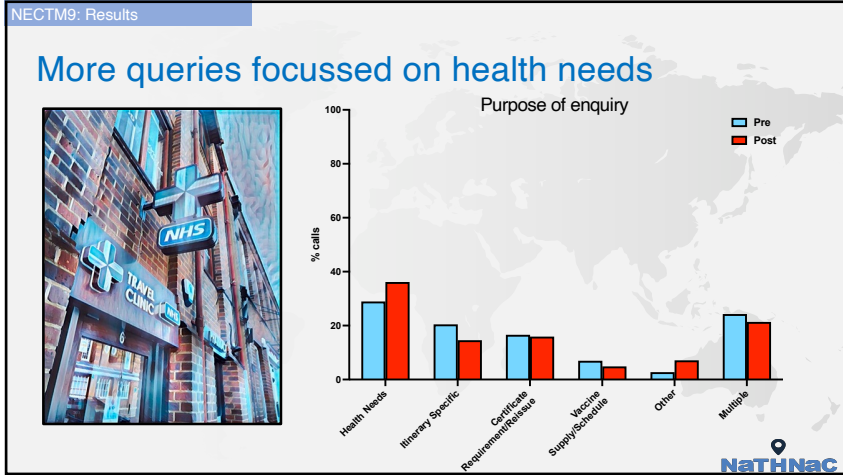
14



15



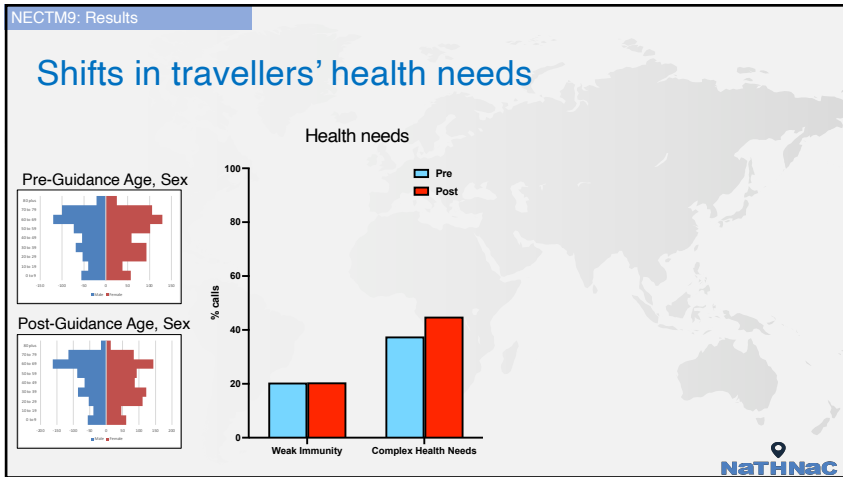
16



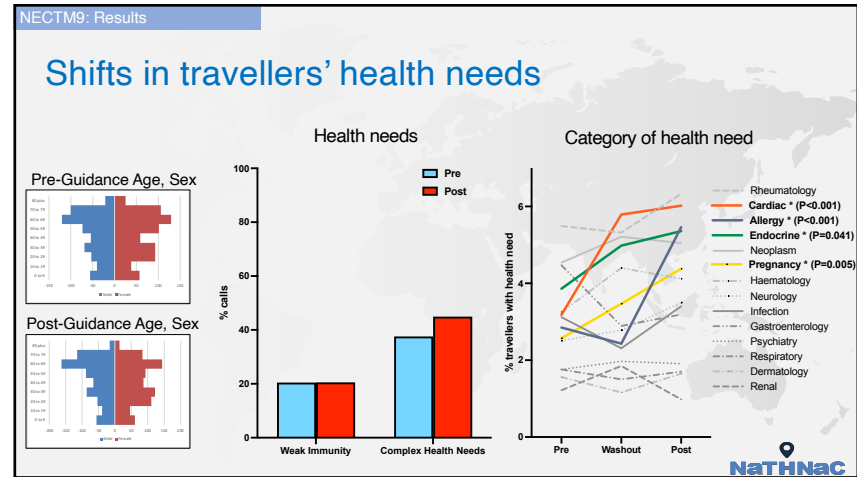
17



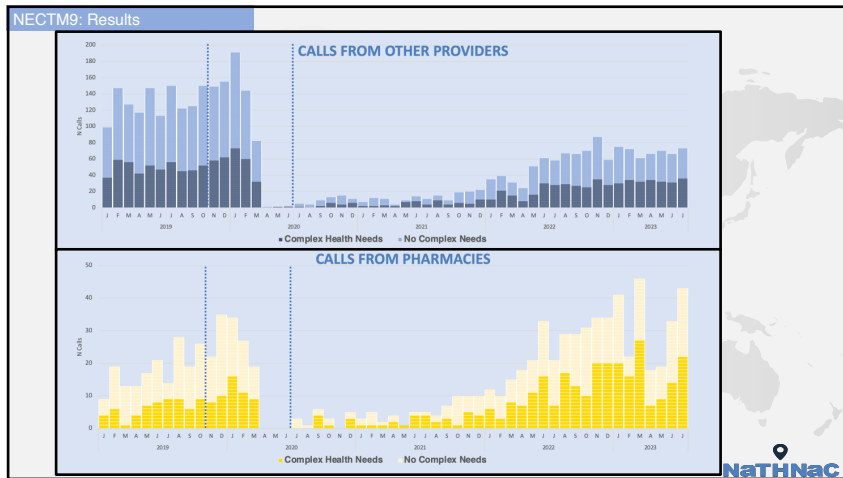
18



19



20



21

NECTM9: Results

More calls relate to complex health needs

Time Period	Complex health needs	No complex health needs	Crude OR	Stratum-Specific Adjusted OR*	(95% CI)	P-value
Calls from Pharmacies						
Pre-Guidance	63	116	1.0	1.0		
Post-Guidance	290	303	1.8	2.0	(1.4-2.9)	<0.001
Calls from Other Providers						
Pre-Guidance	492	805	1.0	1.0		
Post-Guidance	581	759	1.3	1.3	(1.1-1.5)	0.014

*Adjusting for region and purpose of travel, immunosuppression, and YFVC status

22

NECTM9: Conclusions

Meeting the changing needs of callers and travellers

- More advice line calls are from pharmacies.
- Most YF Vaccination Centres are now pharmacies.
- The likelihood that a call relates to a traveller's complex health needs has risen:
 - Doubled for pharmacies;
 - x1.3 for other providers.

23

NECTM9: Conclusions

Meeting the changing needs of callers and travellers

- Calls may not represent all travel health consultations.
 - Simple queries fully addressed by guidance?
 - Complex queries identified due to guidance?
 - New practitioners unaware of advice line?
- Effects of YF Guidance and effects of COVID-19 coincided:
 - Some changes in travel practices may be temporary.
 - Some may mark long-term shifts in practice.
- Suggests a need for outreach to pharmacy providers for further research, engagement, and support.

24

Many thanks

To the team at NaTHNaC's advice line, and to NaTHNaC's funders, hosts, and partners.



25

Questions? Answers?



26