

DO UK TRAVEL AND TOURISM TRENDS REFLECT PRE-TRAVEL HEALTH ADVICE SERVICE USAGE?

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Introduction

The International Passenger Survey (IPS) has continuously collected information about passengers entering and leaving the UK since 1961. The IPS conducts between 700,000 and 800,000 interviews a year of which over 250,000 are used to produce estimates of Overseas Travel and Tourism. This data set is publicly available to download from the Office of National Statistics website.

To safeguard the health of travellers and to reduce the spread of diseases internationally, travel health services in England, Wales, and Northern Ireland are supported by a national travel health advice service; the National Travel Health Network and Centre (NaTHNaC). TravelHealthPro is the website of NaTHNaC. The website provides information aimed at healthcare professionals advising travellers, as well as guidance for travellers themselves. There are country specific information pages that display vaccine and malaria prevention recommendations. NaTHNaC also conducts a daily horizon scan of international disease outbreaks and reports those that are of concern to UK travellers on the relevant country pages. The website also contains evidence-based fact sheets on travel-related risks and disease.

Many of the queries of health professionals advising travellers have can be answered by consulting the website, however for more specialist health needs or complex itineraries NaTHNaC provides a telephone advice line. The advisors, usually specialist travel health nurses, record details about each call on an online form. All calls have information on the destination of travel recorded, and thus it is possible to see how many calls per year pertain to each country. Similarly, website traffic can be segregated by looking at unique page views for each country information page. It is also possible to generate per country information on the number of NaTHNaC reported outbreaks.

This study looked at countries that were queried more than would be expected given IPS-data on traveller flows, and contrasted the usage between the website versus telephone line. The aim of the study was to highlight destination countries that relied disproportionately on NaTHNaC resources, particularly those that utilised the resource-intensive telephone line relative to the website.

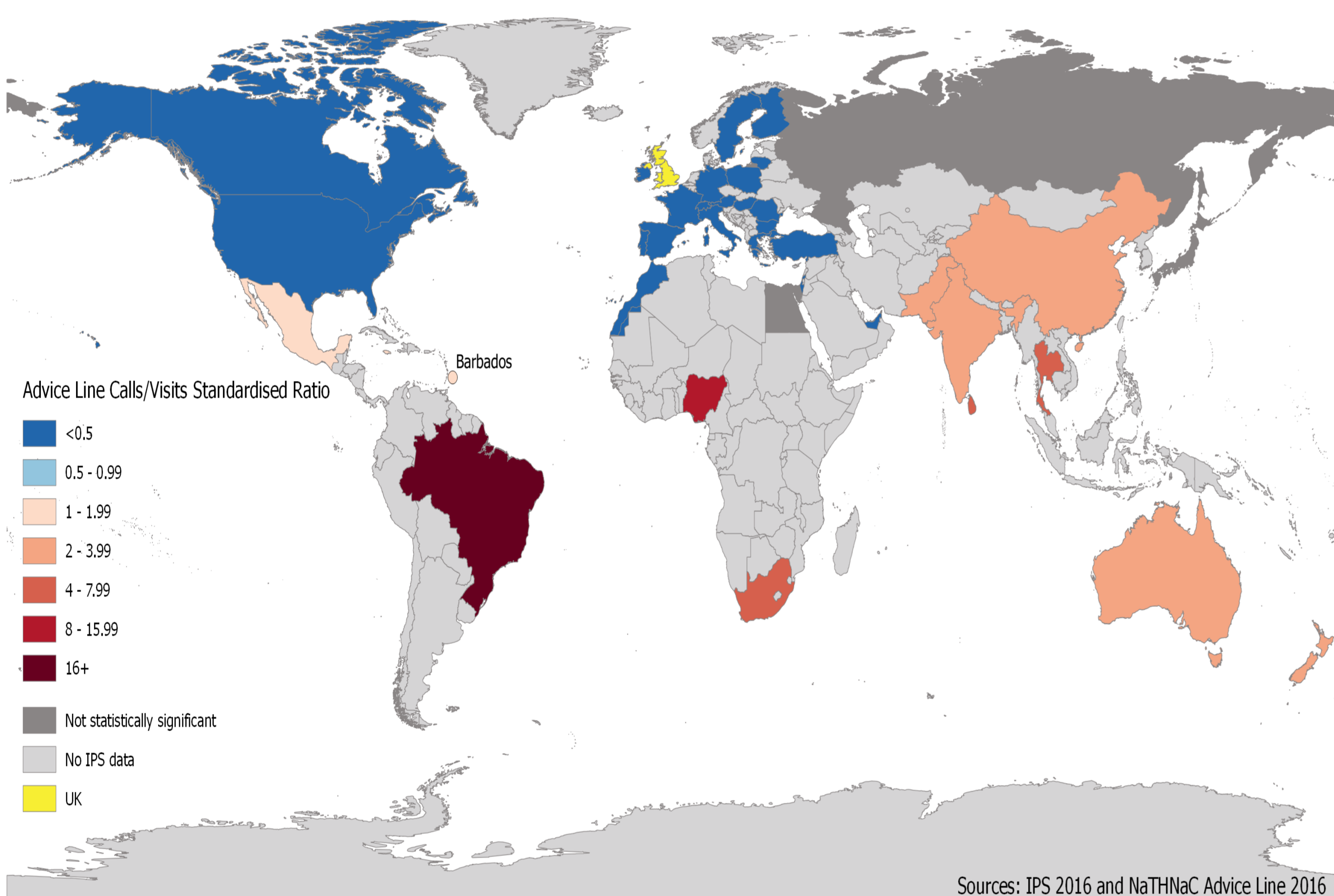


Figure B Map representing a standardised ratio (SR) of advice line call number versus IPS visits. A SR value of over 1 suggests there are more calls for a country than would be expected based on visits. A SR of less than 1 suggests there are fewer calls for a country than would be expected based on visits. Countries shown in dark grey had a SR calculated that was found not to be statistically significant. The UK is shown in yellow.

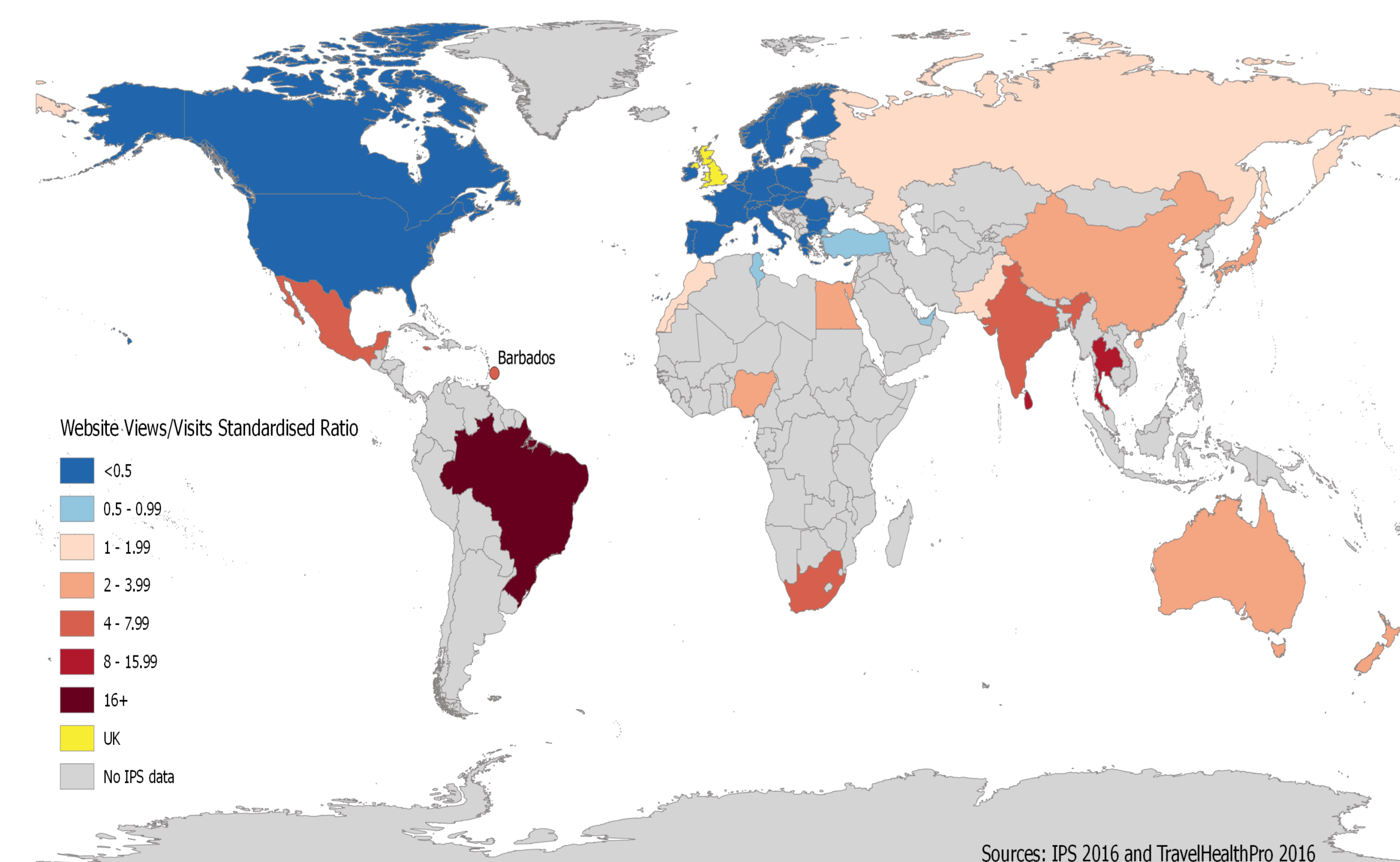


Figure C Map representing a standardised ratio (SR) of website views versus IPS visits. A SR value of over 1 suggests there are more website views for a country than would be expected based on visits. A SMR of less than 1 suggests there are fewer website views for a country than would be expected based on visits. There were no countries where the SR calculated was found to not be statistically significant. The UK is shown in yellow.

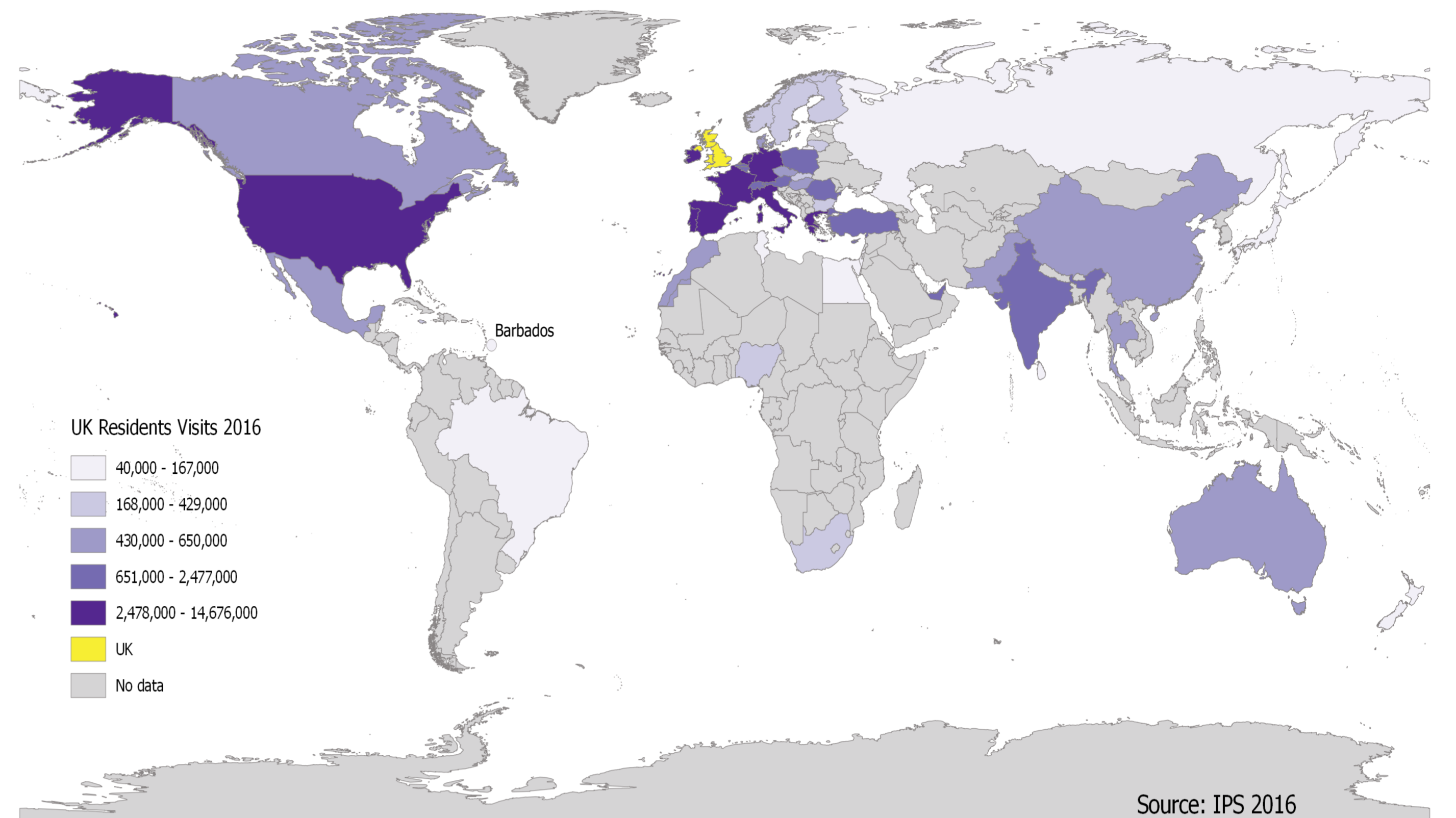


Figure A Map representing passenger travel taken from the IPS 2016 dataset detailing UK residents visits abroad. The dataset contains visit numbers for the most popular destinations. Countries with no data given are shown in grey. The UK is shown in yellow.

Methods

Data on UK traveller destinations was obtained from the International Passenger Survey (IPS) 2016. IPS data was indexed according to ISO 3166 country codes and any non-country specific entries e.g. 'rest of the world' were combined to give a total for 'other'.

Website traffic data was downloaded from Google Analytics. Pages with less than 10 views per year were dropped as these typically contained pages from a variety of non-country sources such as pages created solely for testing purposes. These pages account for around 0.1% of total location pages views. Unique page view (hereafter known as views) data was generated for each country specific website information page. In cases where destinations within a country had separate pages e.g. Azores-Portugal and Portugal, these were combined prior to merging with the IPS 2016 dataset. After appropriate renaming and merging, any unmatched view data was matched to the IPS 2016 'other' category.

Advice line data for 2016 was downloaded from the provider (Formic). The 'country' field is categorical; hence it was queried in a structured fashion and collapsed to give total calls for each country. Some calls mention multiple countries hence it was necessary to separate this field to give one 'hit' for each country per call. Again, some countries needed to be renamed prior to merging with IPS 2016. After appropriate renaming and merging, any unmatched advice line data was matched to the IPS 2016 'other' category. Note a large proportion of calls could simply be assigned to a continent and these are by definition matched to the 'other' category.

NaTHNaC website and telephone data for 2016 were indexed to allow for a comparison with the IPS data. A standardised ratio (SR) per country was calculated for views compared to IPS visits, and likewise for telephone calls. Results were mapped and SRs between website and telephone line compared. SRs were not calculated for outbreak data due to low numbers.

All data analysis was performed using STATA and Excel.

Results

A SR of over 1 suggests there are more views/calls for a country than would be expected based on visits. A SR of less than 1 suggests there are fewer views/calls for a country than would be expected based on visits. The IPS 2016 data for UK residents visits abroad is shown in Figure A. Figures B and C show the SR calculations for advice line and website views respectively.

The analysis revealed destinations outside Europe, U.S., and Canada as over-queried for both services relative to traveller flows. The singularly most over-queried country for both services was Brazil. Highly queried countries that relied more on the telephone service included Brazil and Nigeria, whilst Sri Lanka and Thailand relied more on the website.

Conclusion

Future work should study why Brazil was vastly overrepresented. It would be useful to examine data from other years to see if this is a recurring pattern, or alternatively if a specific event can explain increased demand for pre-travel advice for this destination. Further studies could consider whether a high usage of especially the advice line reflects specific needs and risks, e.g. a higher proportion of special risk travellers and/or ongoing disease outbreaks, an over-representation of visiting-friends-and-relatives travellers (VFR) who may less inclined to seek travel health information on websites, or simply queries of a routine nature that could be addressed by better signposting on the website.