

Neurology® Resident & Fellow Mystery Case

Page description:

January 15, 2019

New Mystery Case!

A 23-year-old man with headaches, confusion, and lower extremity weakness

Adapted from a Clinical Reasoning article by NM Patel, J Bronder, M Motta, and NA Morris. This case will be published in full format in the April 30, 2019, issue of *Neurology*. Please enter your demographic details at the end of the Mystery Case to help us better track responses (demographic information will remain anonymous). To receive recognition for your responses, enter your name and affiliation (optional). This information may be displayed, along with your number of correct answers, on the Neurology.org public website if you enter the most correct answers within one year.

1. Where would you localize this patient's presenting signs? (select 2) *

- | | |
|--|---|
| <input type="checkbox"/> cavernous sinus | <input type="checkbox"/> right postganglionic sympathetic chain |
| <input type="checkbox"/> central spinal cord | <input type="checkbox"/> parasagittal |
| <input type="checkbox"/> upper motor neuron above mid-pons | <input type="checkbox"/> cauda equina |
| <input type="checkbox"/> multifocal meningeal | <input type="checkbox"/> right occipital lobe |
| <input type="checkbox"/> CNIII nucleus | <input type="checkbox"/> ocular neuromuscular junction |

Mystery Case Question #2

2. Which options best fit the imaging shown in Figure 1? (select 2)

*

- bilateral, patchy T2 hyperintensities in the caudate, putamen, and posterior limb of the internal capsule
- global cerebral atrophy
- bilateral, patchy T2 hyperintensities in the caudate and anterior limb of the internal capsule
- a longitudinally extensive hyperintensity extending from the upper cervical spine to the thoracic spine with associated cord enhancement
- normal cervical and thoracic imaging
- confluent bilateral hyperintensities of the basal ganglia and thalamus
- a longitudinally extensive hyperintensity extending from the upper cervical spine to the thoracic spine without associated cord enhancement
- a longitudinally extensive hyperintensity extending from C1 to C7
- a transverse hyperintensity with patchy enhancement
- normal brain scan

Mystery Case Question #3

3. What are your top 3 differential diagnoses? (select 3) *

- acute disseminated encephalomyelitis (ADEM)
- Bickerstaff encephalitis
- hyperosmolar hyperglycemic state
- parasagittal intracranial abscess
- LGI-1 encephalitis
- GFAP astrocytopathy
- neurosarcoidosis
- flavivirus myeloencephalitis
- neuromyelitis optica
- MOG-associated encephalomyelitis

Demographics

Page description:

Please answer the following questions to help us better track responses. Answers to these questions will remain anonymous.

4. How many years have you been in practice?

*

- 1-4
 - 5-10
 - Over 10
-

5. What is your primary work setting? *

- Academic Based
 - Government Based
 - Hospital Based
 - Multispecialty Group
 - Neurology Group
 - Other Public or Private Hospital or Clinic
 - Solo Practice
-

6. What is your current level of training? *

- Faculty/Board certified physician
 - Resident/Fellow
 - Medical Student
 - Advanced Practice Provider
-

7. Do you currently reside in the United States?

*

- Yes
- No

8. If no, in which country do you reside?

Optional Information

Page description:

Please enter your information here to receive credit for your answers.

9. Please enter the information below. This information is optional.

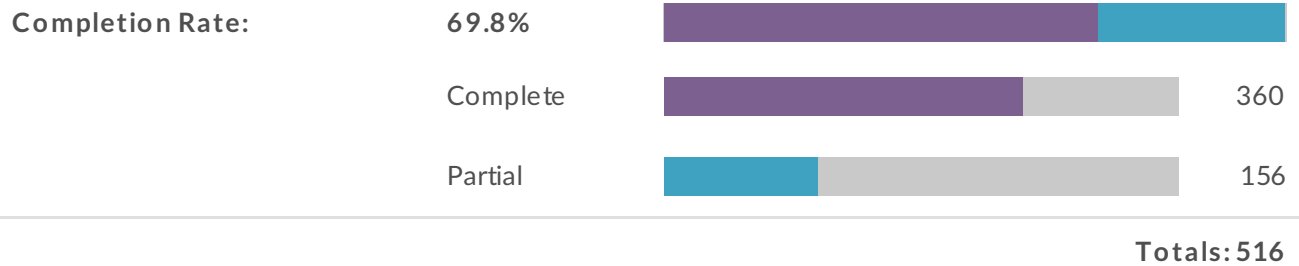
Name

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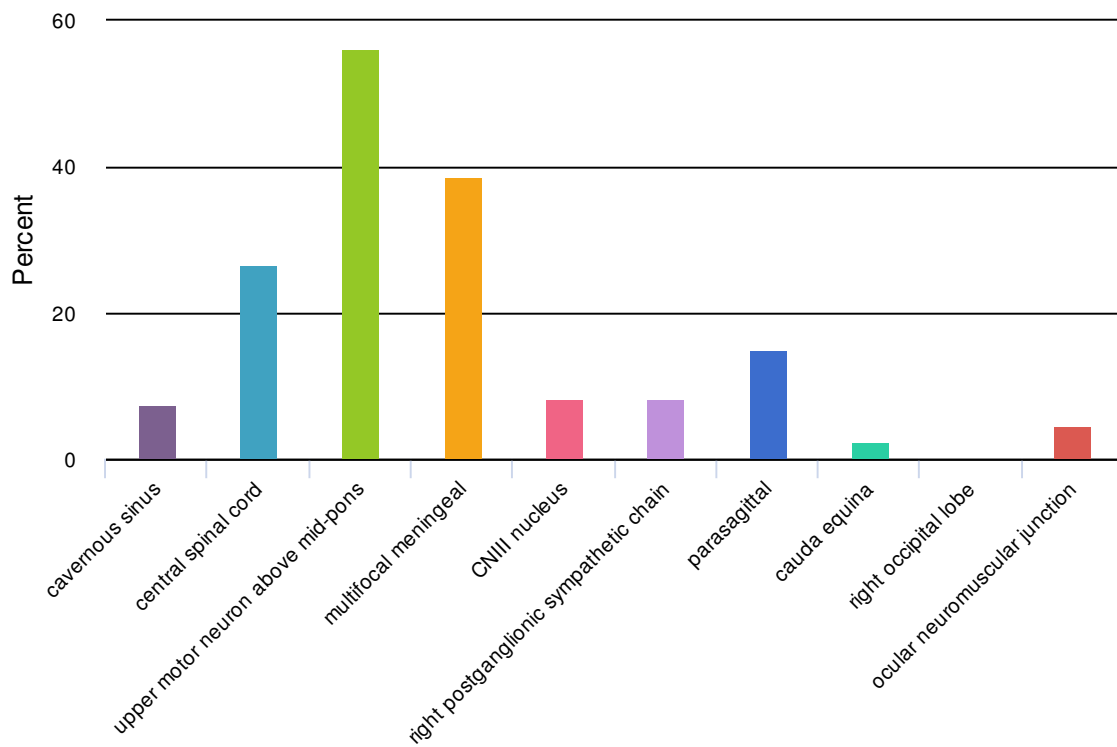
Institution/Affiliation

Report for Mystery Case - Answers Due February 11, 2019

Response Counts

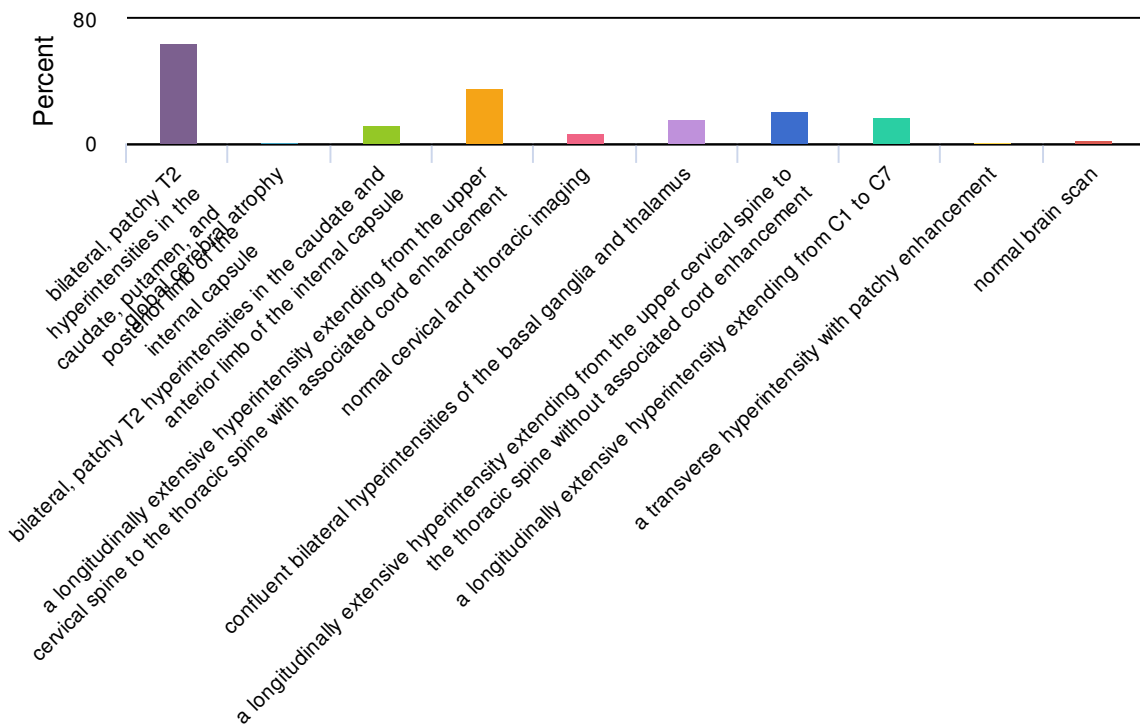












1. Where would you localize this patient's presenting signs? (select 2)



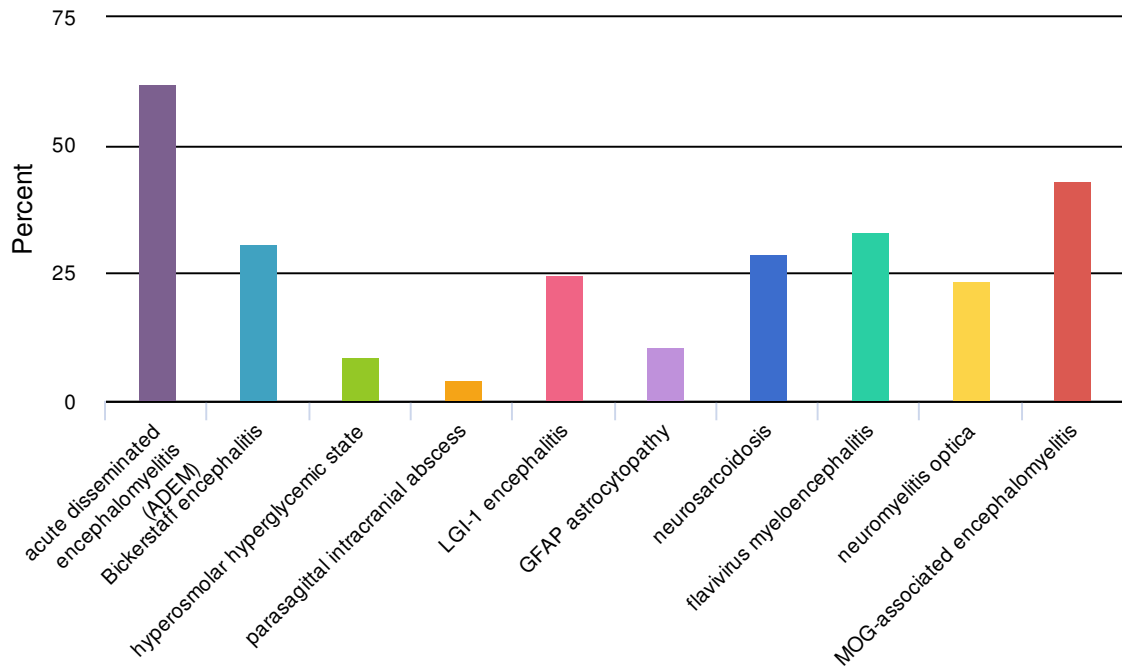
Value	Percent	Responses
cavernous sinus	7.6%	39
central spinal cord	26.6%	136
upper motor neuron above mid-pons	56.4%	289
multifocal meningeal	38.7%	198
CNIII nucleus	8.2%	42
right postganglionic sympathetic chain	8.2%	42
parasagittal	15.0%	77
cauda equina	2.5%	13
right occipital lobe	0.4%	2
ocular neuromuscular junction	4.5%	23











2. Which options best fit the imaging shown in Figure 1? (select 2)



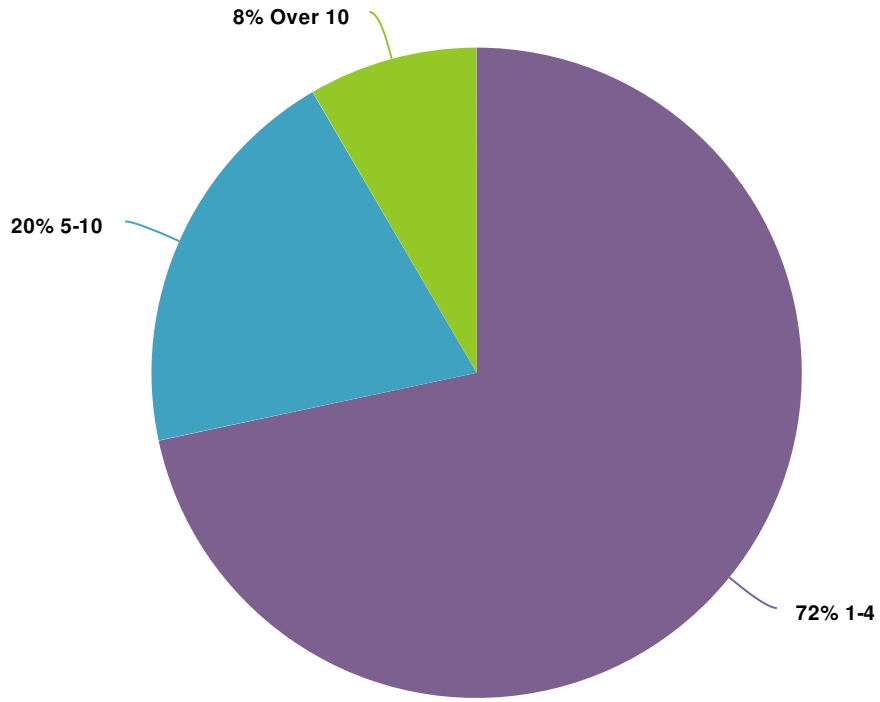
Value		Percent	Responses
bilateral, patchy T2 hyperintensities in the caudate, putamen, and posterior limb of the internal capsule		65.3%	279
global cerebral atrophy		1.4%	6
bilateral, patchy T2 hyperintensities in the caudate and anterior limb of the internal capsule		11.9%	51
a longitudinally extensive hyperintensity extending from the upper cervical spine to the thoracic spine with associated cord enhancement		36.3%	155
normal cervical and thoracic imaging		8.0%	34
confluent bilateral hyperintensities of the basal ganglia and thalamus		15.9%	68
a longitudinally extensive hyperintensity extending from the upper cervical spine to the thoracic spine without associated cord enhancement		21.1%	90
a longitudinally extensive hyperintensity extending from C1 to C7		16.9%	72
a transverse hyperintensity with patchy enhancement		1.2%	5
normal brain scan		3.0%	13

3. What are your top 3 differential diagnoses? (select 3)



Value		Percent	Responses
acute disseminated encephalomyelitis (ADEM)		62.0%	258
Bickerstaff encephalitis		31.0%	129
hyperosmolar hyperglycemic state		8.9%	37
parasagittal intracranial abscess		4.1%	17
LGI-1 encephalitis		24.8%	103
GFAP astrocytopathy		10.6%	44
neurosarcoidosis		28.8%	120
flavivirus myeloencephalitis		33.2%	138
neuromyelitis optica		23.6%	98
MOG-associated encephalomyelitis		43.0%	179

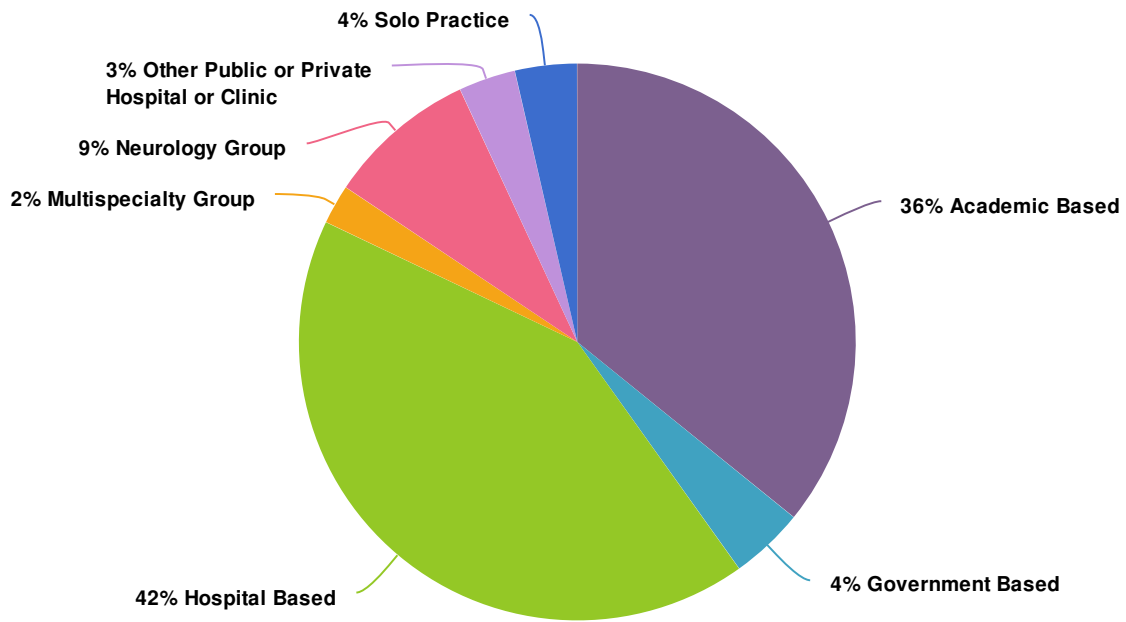
4. How many years have you been in practice?



Value	Percent	Responses
1-4	71.6%	280
5-10	19.9%	78
Over 10	8.4%	33

Totals: 391

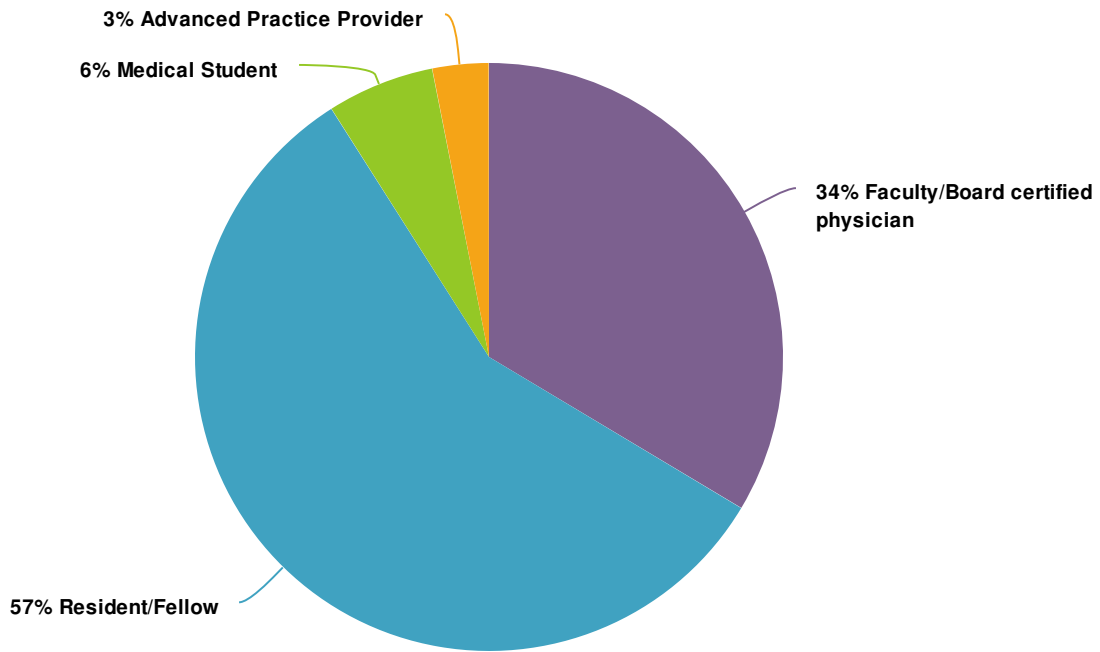
5. What is your primary work setting?



Value	Percent	Responses
Academic Based	35.8%	140
Government Based	4.3%	17
Hospital Based	41.9%	164
Multispecialty Group	2.3%	9
Neurology Group	8.7%	34
Other Public or Private Hospital or Clinic	3.3%	13
Solo Practice	3.6%	14

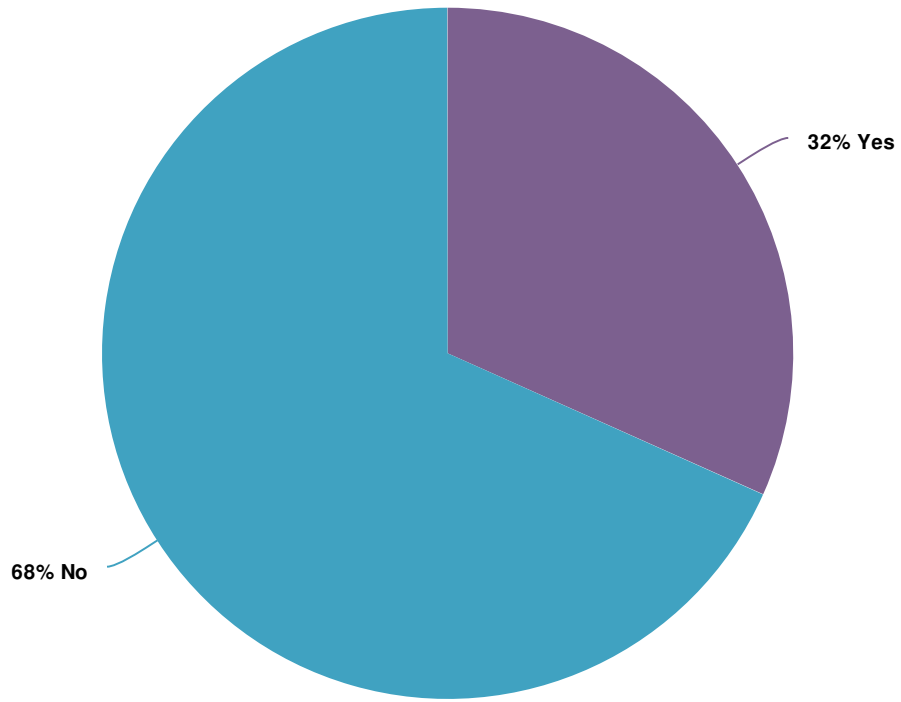
Totals: 391

6. What is your current level of training?



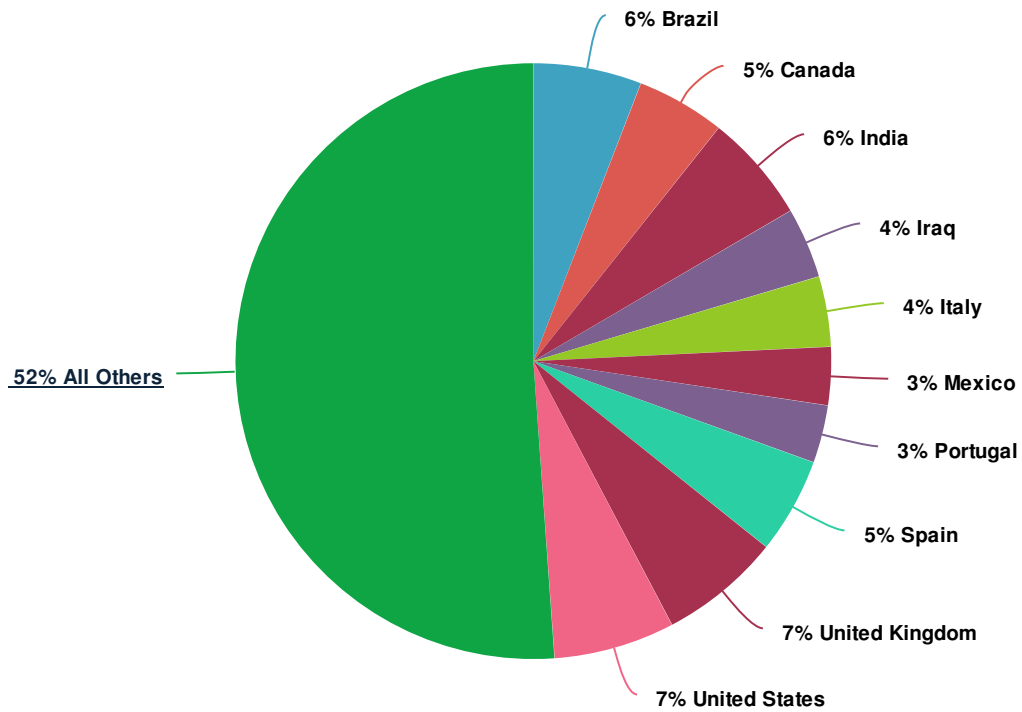
Value	Percent	Responses
Faculty/Board certified physician	33.6%	131
Resident/Fellow	57.4%	224
Medical Student	5.9%	23
Advanced Practice Provider	3.1%	12
		Totals: 390

7. Do you currently reside in the United States?



Value		Percent	Responses
Yes		31.7%	124
No		68.3%	267
			Totals: 391

8. If no, in which country do you reside?



Value	Percent	Responses
Brazil	6.0%	17
Canada	4.9%	14
India	6.0%	17
Iraq	3.9%	11
Italy	3.9%	11
Mexico	3.2%	9
Portugal	3.2%	9
Spain	5.3%	15
United Kingdom	6.7%	19
United States	6.7%	19
Afghanistan	1.8%	5
Albania	0.7%	2




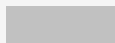








Totals: 285

Value		Percent	Responses
Algeria		1.4%	4
American Samoa		0.4%	1
Andorra		0.7%	2
Angola		0.7%	2
Antarctica		0.4%	1
Argentina		0.7%	2
Australia		1.8%	5
Bahrain		0.4%	1
Bangladesh		0.4%	1
Belgium		1.1%	3
Cambodia		0.4%	1
Cameroon		0.4%	1
Chile		1.1%	3
China		0.7%	2
Colombia		1.4%	4
Denmark		0.4%	1
Dominican Republic		0.4%	1
Egypt		1.4%	4
Finland		0.4%	1
France		1.1%	3
Georgia		0.4%	1
Germany		2.8%	8

Totals: 285

Value		Percent	Responses
Greece		0.4%	1
Hungary		0.4%	1
Indonesia		0.4%	1
Ireland		0.7%	2
Israel		0.4%	1
Japan		2.1%	6
Jordan		0.7%	2
Lebanon		0.7%	2
Macedonia		0.4%	1
Malaysia		0.4%	1
Malta		0.4%	1
Moldova		0.4%	1
Morocco		0.7%	2
Myanmar [Burma]		0.4%	1
Netherlands		0.4%	1
New Zealand		0.7%	2
Pakistan		2.1%	6
Paraguay		0.4%	1
Peru		1.1%	3
Romania		2.5%	7
Russia		1.4%	4
Saudi Arabia		2.1%	6

Totals: 285

Value		Percent	Responses
Serbia		0.4%	1
Slovenia		1.1%	3
South Africa		0.7%	2
South Korea		0.4%	1
Sri Lanka		0.7%	2
Switzerland		1.1%	3
Taiwan		1.1%	3
Thailand		1.4%	4
Turkey		1.4%	4
Ukraine		0.7%	2
United Arab Emirates		1.8%	5
Yemen		0.7%	2

Totals: 285

9. Please enter the information below. This information is optional.

Name



Email



Institution/Affiliation

medicina paulo sohag são tawam
center city clinic federal
san medical de baghdad
nhs university imss
hospital
neurology college trust
madras hospitals foundation
universidade teaching