

# My Big Fat Post-Match Analysis

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# Objectives

1. Learn what metrics to use to evaluate your match
2. Learn targeted strategies to improve match results
3. Learn to assess reasons applicants chose other programs

Does your program have a process of analyzing match results?

\*Please note all of the following data is fictitious



# Who am I losing to?



# Where Ranked Categorical Applicants Matched

Where Ranked Categorical Applicants Matched

	2016-2017	2015-2016	2014-2015	2013-2014
<b>LOCAL PROGRAMS</b>	n=117	n=123	n=155	n=170
State University of Red	23	16	18	20
Orange Medical School	2	5	7	9
Yellow School of Medicine	1	8	5	6
State University of Green	4	7	5	8
<b>Total</b>	<b>30</b>	<b>36</b>	<b>35</b>	<b>43</b>

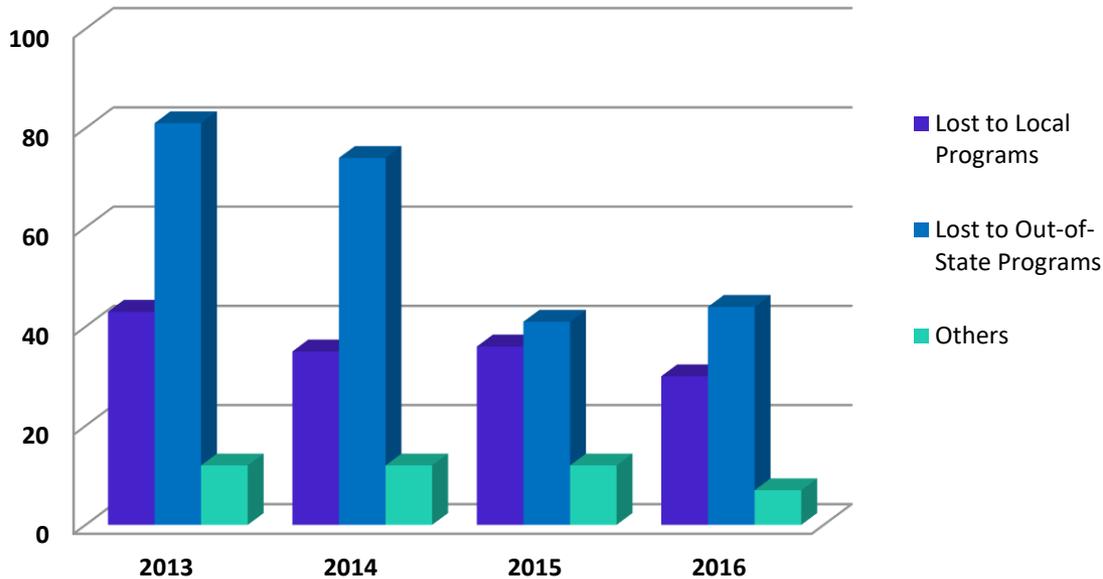
Emergency Medicine	1	0	1	0
Psychiatry	0	1	0	0
Physical Medicine and Rehab	0	4	1	1
Medicine Preliminary	3	0	2	2
Primary Care	2	1	4	3
Orthopaedic Surgery	0	0	0	1
Otolaryngology	0	2	0	0
Anesthesiology	0	2	3	1
Unmatched	1	0	0	2
Dermatology	0	1	1	1
Family Medicine	0	1	0	1
<b>Total</b>	<b>7</b>	<b>12</b>	<b>12</b>	<b>12</b>

Applicants matched	36	34	34	34
<b>Lost to Local Programs</b>	<b>30</b>	<b>36</b>	<b>35</b>	<b>43</b>
Lost to Non-Local Programs	44	41	74	81
Others	7	12	12	12
% Lost to Local Programs	26%	29%	23%	25%
<b>Total</b>	<b>117</b>	<b>123</b>	<b>155</b>	<b>170</b>

	2016-2017	2015-2016	2014-2015	2013-2014
<b>NON-LOCAL PROGRAMS</b>	n=117	n=123	n=155	n=170
Blue Medical School	2	2	3	2
Purple School of Medicine	3	2	2	0
State University of Magenta	4	1	8	5
Grey Medical School	1	4	2	0
Lavender School of Medicine	0	3	3	4
State University of Orange	3	4	5	6
Green Medical School	8	5	9	11
Aqua School of Medicine	2	3	12	16
State University of Peach	3	2	13	5
Cerulean Medical School	6	5	14	7
Aqua School of Medicine	7	6	2	15
State University of Red	5	4	1	10
<b>Totals</b>	<b>44</b>	<b>41</b>	<b>74</b>	<b>81</b>

# Which programs are you losing applicants to?

Where Ranked Applicants Matched



- Look for the trends!

- Are you losing applicants to the same programs every year?

- Are you losing applicants to programs in your local area or out-of-state programs?

# New York/New Jersey/Out-of-State



	#	%
Total Applicants Interviewed	653	
Total Applicants from NY Interviewed	333	51%
Total Applicants from NJ Interviewed	52	8%
Total Applicants from Out-of-State Interviewed	268	41%
Total Interns from NY	11	19%
Total Interns from Out-of-State	47	81%

Total Categorical Applicants Interviewed	423	
Total Categorical Applicants from NY Interviewed	199	47%
Total Categorical Applicants from NJ Interviewed	16	4%
Total Categorical Applicants from Out-of-State Interviewed	208	49%
Total Categorical Interns from NY	6	17%
Total Categorical Interns from Out-of-State	30	83%

Total Preliminary Applicants Interviewed	230	
Total Preliminary Applicants from NY Interviewed	134	58%
Total Preliminary Applicants from NJ Interviewed	36	16%
Total Preliminary Applicants from Out-of-State Interviewed	60	26%
Total Preliminary Interns from NY	5	23%
Total Preliminary Interns from Out-of-State	17	77%



# New York/New Jersey/Out-of-State

- Use your website to highlight the advantages of your program's location
  - Points of interest
  - Distance from major cities
  - Patient diversity
- Pair up your out-of-state applicants with residents from the same medical school or that grew up in the same region



Why am I  
losing  
people?



# Post Match Survey

- The best way to determine why applicants did not rank your program highly, or at all, is to ask them!
- Keep the survey short and simple
  - Ask what they like about the interview experience
  - Ask what they would change about the interview day
  - Ask which factors were most important to them when making their rank list
- Use this information to help improve your interview process



# Post Match Survey

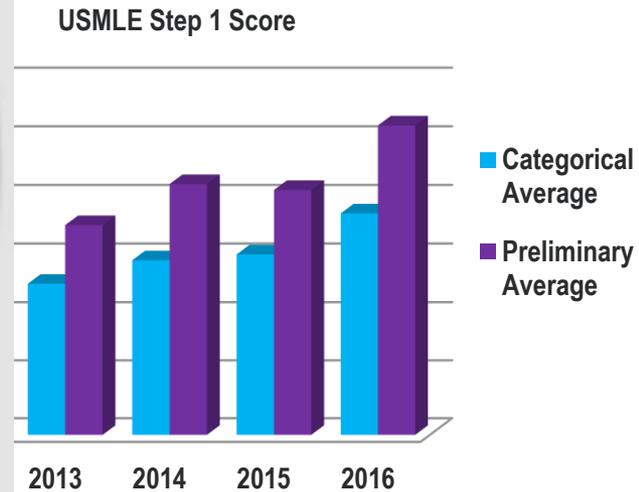
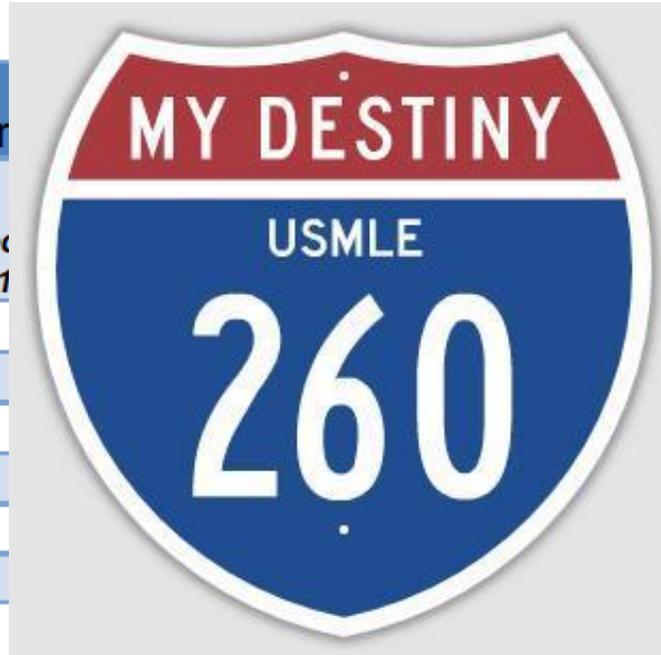
2015 Categorical Post Match Survey			
<b>I ranked other program</b>			
			<b>2013</b>
Location	<input type="checkbox"/> Location	<input type="checkbox"/> Med/Peds Program	87 76%
Academics/Reputation	<input type="checkbox"/> Academics/Reputation	<input type="checkbox"/> Program Size	78 68%
Fellowship Placement	<input type="checkbox"/> Fellowship Placement	<input type="checkbox"/> Shabbos Program	57 49%
Research	<input type="checkbox"/> Research	<input type="checkbox"/> Affiliation with Established Medical School	35 31%
Primary Care Focus	<input type="checkbox"/> Primary Care Focus	<input type="checkbox"/> Diversity of Applicants	8 7%
Interview experience	<input type="checkbox"/> Interview experience	<input type="checkbox"/> Program Compatibility	21 17%
Patient Population	<input type="checkbox"/> Patient Population		21 18%
Med/Peds Program	Other:		3 2%
Program Size	<input type="text"/>		38 33%
Shabbos Program			5 4%
Affiliation with Establishe			21 18%
Diversity of Applicants			389
Program Compatibility			
<b>Does the program that</b>			
Yes	<input type="radio"/> Yes		32 30%
No	<input type="radio"/> No		75 70%
<b>Is there something you</b>			
<b>on interview day (that )</b>			
Overall very impressive pr	Comments:		
Very welcoming interview s	<input type="text"/>		
I was pleasantly surprised			
Tours were too long			
<b>3. Is there something you learned about our program on interview day (that you did not know beforehand) that had a large impact on how you ranked us? If so, please explain.</b>			
<input type="text"/>			

# Who am I getting?



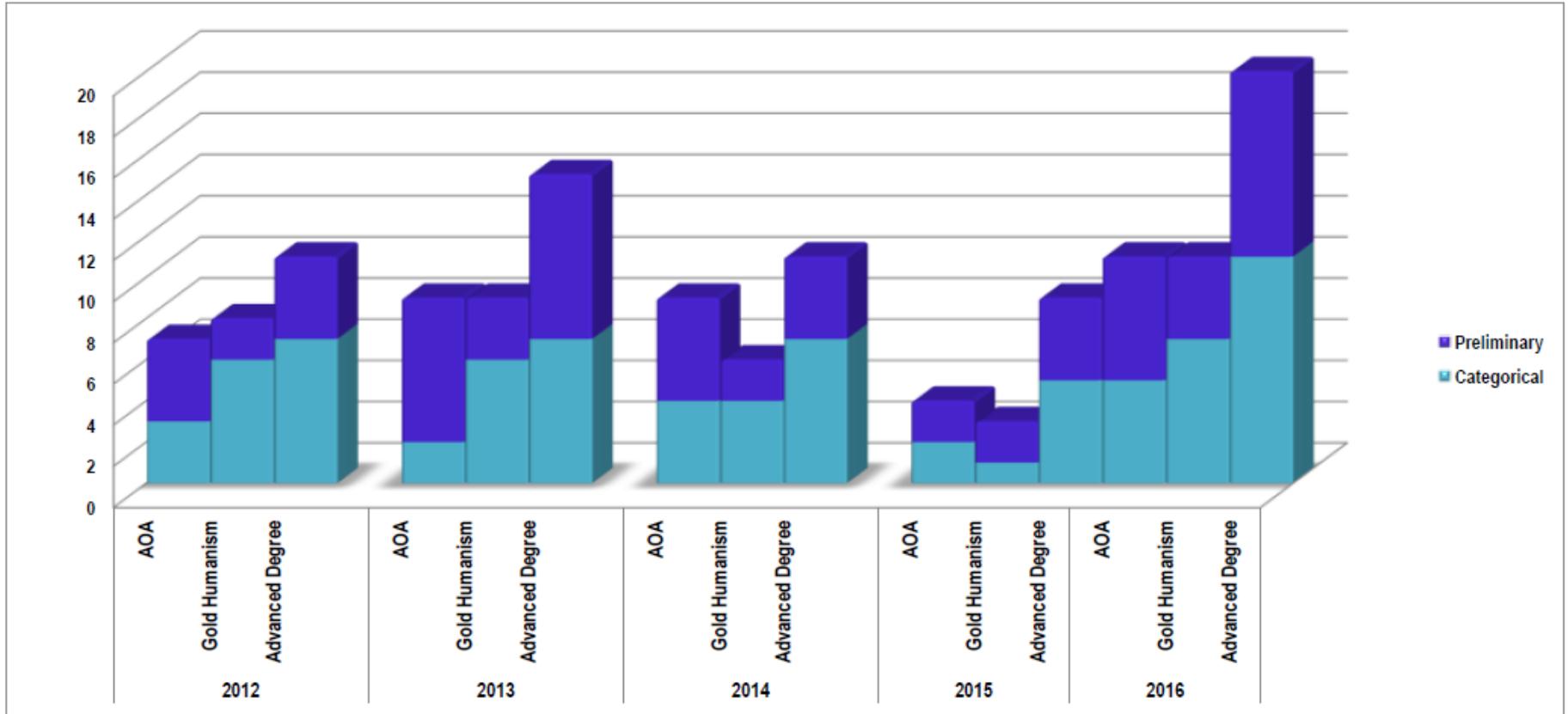
# USMLE Scores

USMLE Scores by Year		
Year	Categorical Average	# Failed Step 1
2011	219	0
2012	219	0
2013	226	0
2014	230	0
2015	231	0
2016	238	0



- While USMLE scores should not be the only criteria used to select applicants to interview, it is still important in the applicant selection process

# AOA/Gold Humanism/Advanced Degree



# Medicine Clerkship Grades

MEDICINE GRADES FOR INCOMING INTERN CLASS	#	%
PASS	14	24
HIGH PASS	18	31
HONORS	26	45



# Top/Middle/Low Medical Schools

March 2016 Match  
Top/Middle/Low Medical Schools

First Name	Last Name	Medical School	Top/Middle/Low
Donner	Anderson	Aqua School of Medicine	Top
Donner	Hernandez	Aqua School of Medicine	Top
Ricky	Ricardo	Bisque Medical School	Top
Sneezy	Jones	Blue Medical School	Top
Cupid	Thomas	Cerulean Medical School	Top
Ginger	Grant	Chartreuse School of Medicine	Top
Thurston	Howell, III	Coral Medical School	Top
Eunice	Howell, III	Cyan School of Medicine	Top
Vixen	Martinez	Green Medical School	Top
Mary Ann	Summers	Green Medical School	Top
Dasher	Garcia	Grey Medical School	Top
Dancer	Rodriguez	Lavender School of Medicine	Top
Happy	Johnson	Orange Medical School	Top
Moe	Howard	Orange Medical School	Top
Bashful	Miller	Purple School of Medicine	Top
Willy	Gilligan	Red School of Medicine	Top
Dopey	Brown	State University of Green	Middle
Skipper	Grumby	State University of Indigo	Middle
Doc	Davis	State University of Magenta	Middle
Professor	Hinkley	State University of Maroon	Middle
Lucy	McGillicuddy	State University of Olive	Middle
Prancer	Wilson	State University of Orange	Middle
Larry	Fine	State University of Orchid	Middle
Comet	Taylor	State University of Peach	Middle
Sleepy	Smith	State University of Red	Middle
Blitzen	Moore	State University of Red	Middle
Rudolph	Martin	Turquoise Medical School	Low
Curly	Howard	Violet School of Medicine	Low
Grumpy	Williams	Yellow School of Medicine	Low

	%	#
Top	55%	16
Middle	34%	10
Low	1%	3



State University of Red



\*\*As referenced by U.S. and World News Report

# Where Our Preliminary Interns Are Going



	Preliminary	Next Residency Location	Next Residency Specialty
	Sleepy Smith	State University of Red	Radiology
	Happy Johnson	Orange Medical School	Anesthesiology
	Grumpy Williams	Yellow School of Medicine	Neurology
	Dopey Brown	State University of Green	PM&R
	Sneezy Jones	Blue Medical School	Anesthesiology
	Bashful Miller	Purple School of Medicine	Anesthesiology
	Doc Davis	State University of Magenta	Radiology
	Dasher Garcia	Grey Medical School	Dermatology
	Dancer Rodriguez	Lavender School of Medicine	Dermatology
	Prancer Wilson	State University of Orange	PM&R
	Vixen Martinez	Green Medical School	Radiology
	Donner Anderson	Aqua School of Medicine	Radiology
	Comet Taylor	State University of Peach	Radiology
	Cupid Thomas	Cerulean Medical School	Neurology
	Donner Hernandez	Aqua School of Medicine	Anesthesiology
	Blitzen Moore	State University of Red	Dermatology
	Rudolph Martin	Turquoise Medical School	Radiology
	Curly Howard	Violet School of Medicine	Radiology
	Larry Fine	State University of Orchid	Anesthesiology
	Moe Howard	Orange Medical School	Dermatology

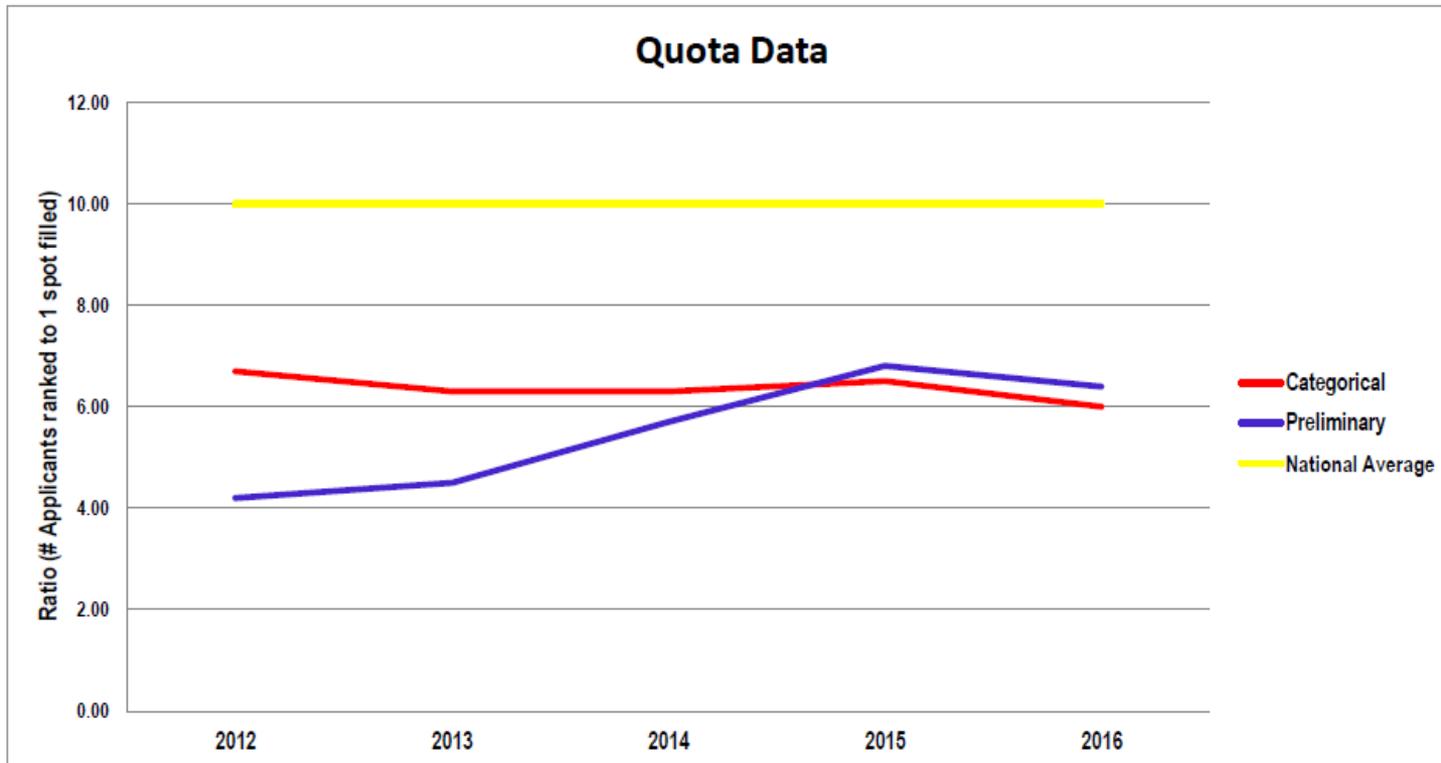
How do I  
make  
changes?



# Quota Data

QUOTA DATA											
C=cat; P=prelim											
Match Year: March of	C/P	RANKED	QUOTA	HOW MANY SPOTS WE FILLED	HOW MANY SPOTS WE REVERTED	WHERE WE FILLED	RATIO	# signed up in pre match	# signed up outside of match	total number of interns	% not bound by match
2012	C	286	30	30	0	200	6.7:1	7		37	7/37=19%
	P	160	22	22	0	93	4.2:1		1	22	1/22=5%
2013	C	335	34	34	0	215	6.3:1	0	0	34	0%
	P	171	22	22	0	98	4.5:1	0	0	22	0%
2014	C	331	34	34	0	213	6.3:1	0	0	34	0%
	P	200	22	22	0	126	5.7:1	0	0	22	0%
2015	C	360	34	34	0	221	6.5:1	0	0	34	0%
	P	215	20	20	0	136	6.8:1	0	0	20	0%
2016	C	395	36	36	0	215	6.0:1	0		36	0%
	P	260	22	22	0	140	6.4:1	0		22	0%

# Quota Data



- Look at your fill ratio trends
  - Use this to determine the amount of people you need to interview
- Make sure that you are interviewing/ranking enough applicants
- Leave a cushion in the chance that you don't do as well in the match

**The members of the NRMP Board used to bemoan program directors' fixation on “number needed to fill,” a common bragging right among residencies. This crude metric of competitiveness says little about program quality, and it is certainly less important than protecting applicants from recruitment pressures. Fundamentally, the Match works best when both applicants and program directors rank each other according to their true preferences.**

Purushottam A. Nagarkar, Jeffrey E. Janis  
(2012) Fixing the “Match”: How to Play the  
Game. *Journal of Graduate Medical Education*:  
June 2012, Vol. 4, No. 2, pp. 142-147.

**The Match is a beautifully designed system: to function best, it requires only that all participants act in a purely selfish manner. If programs and students can accept a degree of uncertainty as the price of optimum performance and simply behave in their own best interests, they will soon realize that the “game” they are playing is more solitaire than poker.**

Fisher CE. A piece of my mind: manipulation and the match. JAMA. 2009;302(12):1266–1267. [[PubMed](#)]

# Interview Data

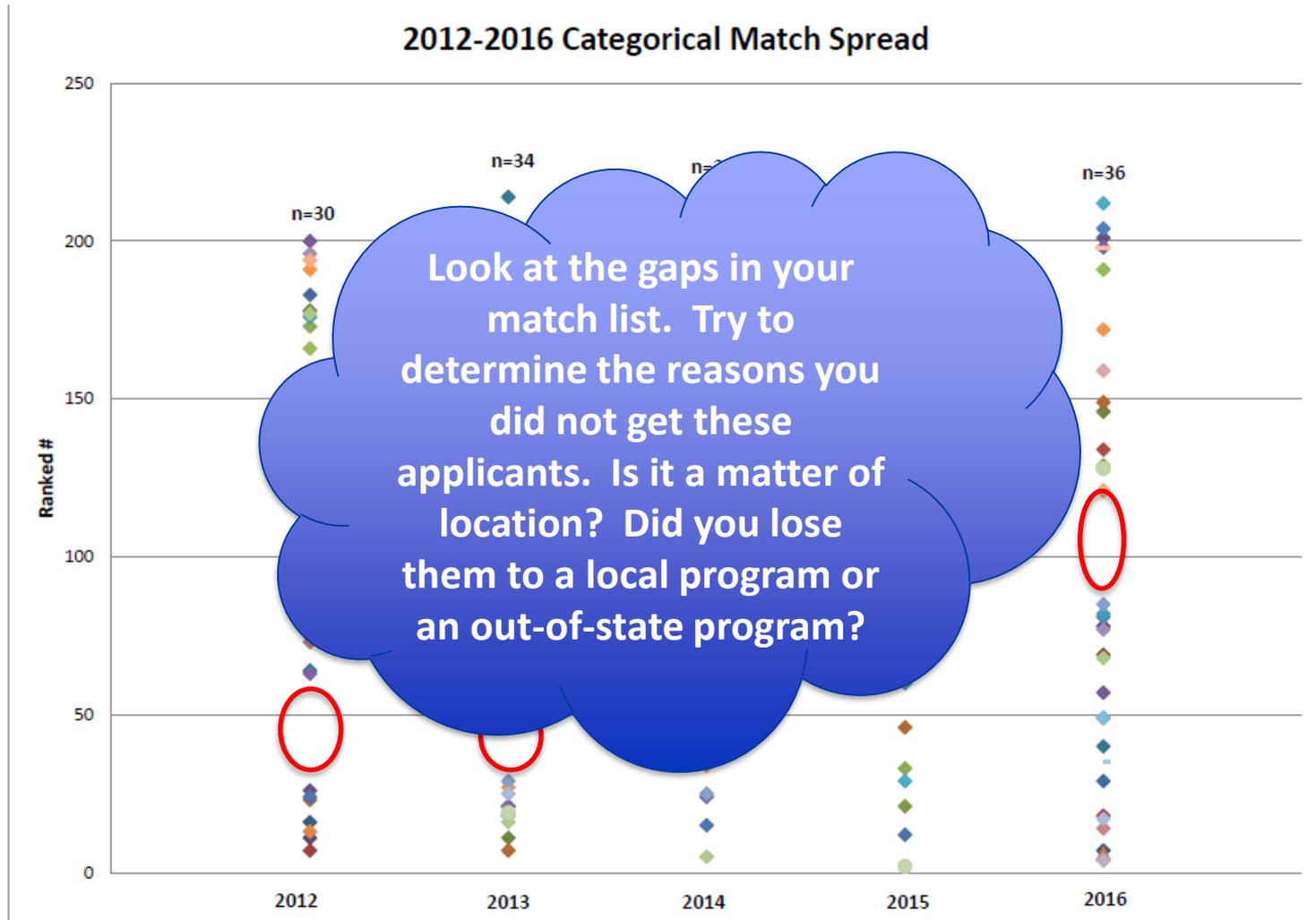
- Be aware of your cancellation/no show rate
  - Why are your applicants cancelling?
    - Is it because they are not interested in the program, financial reasons, or scheduling issues?
      - In situations of scheduling issues or unforeseen circumstances, do your best to try and reschedule those applicants
- When deciding how many applicants to invite, always bear in mind that a certain amount of applicants will undoubtedly cancel at the very last minute



# Interview Data

Categorical Interview Data 2012-2016					
	2012	2013	2014	2015	2016
Applied	402	526	563	595	684
Invited for interview	334	386	403	445	470
Accepted invite/ Scheduled	327	370	386	421	453
Cancelled Interview/No show	38 (12%)	34 (9%)	53 (14%)	60 (14%)	53 (12%)
Interviewed	289	336	333	361	400
Ranked	286	335	331	360	395
Quota	30	34	34	34	34
#Filled in Match	30	34	34	34	34
Outside match	6	0	0	0	0
R1's starting on June 25th	38	34	34	34	34

# Match Spread



How do I  
increase  
diversity?

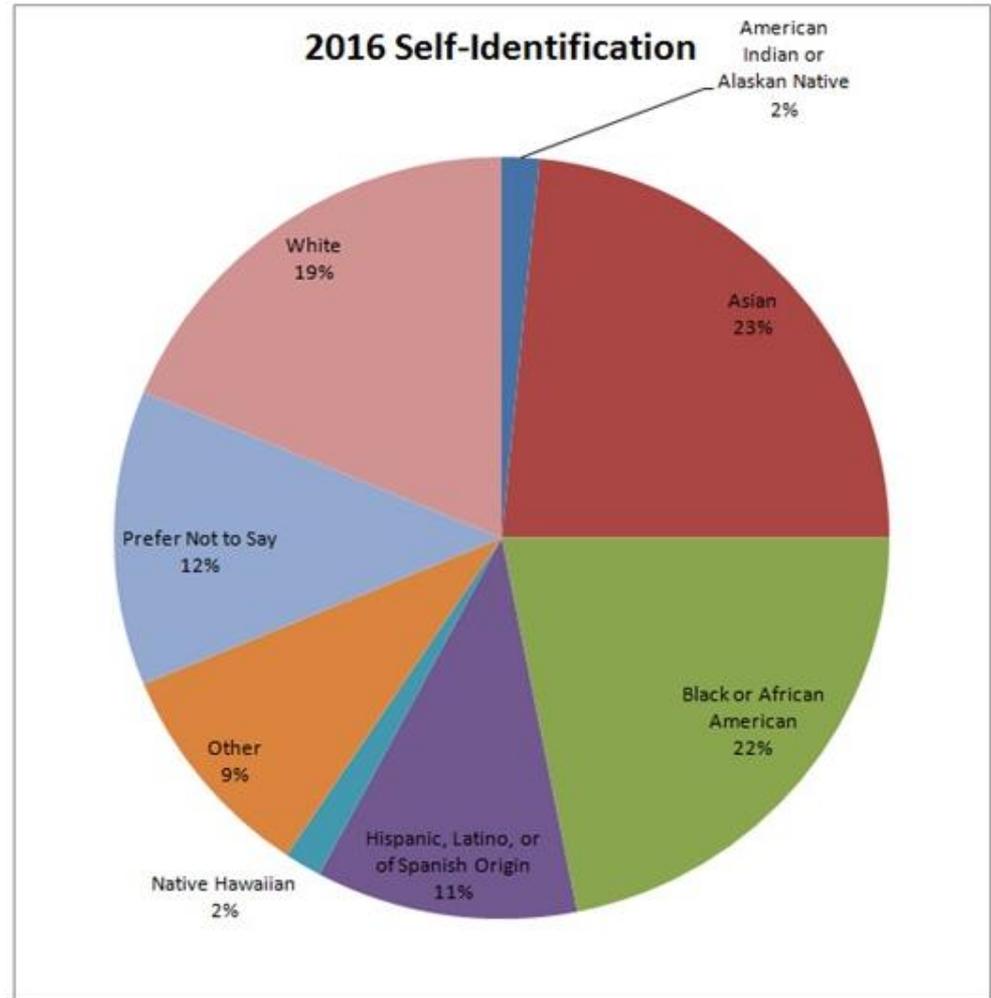


# Under-represented Minorities

Self-Identified Race/Ethnicity	#
American Indian or Alaskan Native	1
Asian	15
Black or African American	14
Hispanic, Latino, or of Spanish Origin	7
Native Hawaiian	1
Other	6
Prefer Not to Say	8
White	12

Categorical URMs	#
Total URMs Applied	200
Total URMs Interviewed	156
Total URMs Ranked	156
Total URMs ranked above fill #	101
Total URMs ranked below fill #	55

Preliminary URMs	#
Total URMs Applied	75
Total URMs Interviewed	60
Total URMs Ranked	60
Total URMs ranked above fill #	45
Total URMs ranked below fill #	15



# Under-represented Minorities

- Look for schools that have a higher level of URMs
  - Letter from Program Director to the Dean
- Track minority applicants separately
  - Use a more holistic approach
  - May have to consider applicants with scores that are below your cutoff
- Have applicants meet with residents with an interest in diversity
- Have applicants meet/interview with under-represented minority faculty members and residents
- Include a statement regarding diversity on your website



# Helpful hints and tips



# General Data

NORTHWELL HEALTH INTERNAL MEDICINE PGY-1 CLASS 2016-17

Track	First	Last	Medical School	Rank	Step 1	Step 2	AOA	GH	2 Lk	Dinner	Specialty
Categorical	Sleepy	Smith	State University	1	275	273	X				Cardiology
Categorical	Happy	Johnson		3	265	263			X	X	Endocrinology
Categorical				5	255	253		X		X	Sleep Medicine
Categorical					245	243				X	Pulmonary/Critical Care
Categorical					235	233	X			X	Infectious Disease
Categorical					225	223			X		Hospitalist Medicine
Categorical					215	213					Primary Care
Categorical					205	203				X	Not Yet Decided
						272			X		Geriatrics
						262		X			Rheumatology
						252				X	Primary Care
						242				X	Palliative Care
Categorical					234	232					Cardiology
Categorical					224	222			X		Endocrinology
Categorical					216	212				X	Sleep Medicine
Categorical				31	204	202	X	X			Pulmonary/Critical Care
Categorical				33	273	271					Infectious Disease
Categorical				35	263	261			X		Hospitalist Medicine
Categorical	La			37	253	251				X	Primary Care
Categorical	Moe			39	243	241		X		X	Not Yet Decided
Categorical	Willy	Gilligan	Red	41	233	231					Geriatrics
Categorical	Skipper	Grumby	State University of Indigo	43	223	221			X		Rheumatology
Categorical	Mary Ann	Summers	Green Medical School	45	213	211				X	Primary Care
Categorical	Ginger	Grant	Chartreuse School of Medicine	47	203	201				X	Palliative Care
Categorical	Professor	Hinkley	State University of Maroon	49	273	270	X			X	Gastroenterology
Categorical	Thurston	Howell, III	Coral Medical School	51	263	260			X		Geriatrics
Categorical	Eunice	Howell, III	Cyan School of Medicine	53	253	250					Rheumatology

While our program does not require applicants to attend recruitment dinners or encourage second looks (unless the applicant needs to take a further look at our program for serious decision-making reasons), we find that a large majority of those that attended a dinner or came for a second look match at our program.

# Number of Different Schools Matched

Track	First	Last	Medical School	Rank	Step 1	Step 2	AOA	GH	2 Lk	Dinner	Specialty
Categorical	Donner	Anderson	Aqua School of Medicine	23	244	242				X	Palliative Care
Categorical	Donner	Hernandez	Aqua School of Medicine	29	214	212				X	Sleep Medicine
Categorical	Ricky	Ricardo	Bisque Medical School	57	233						Not Yet Decided
Categorical	Sneezy	Jones	Blue Medical School								Infectious Disease
Categorical	Cupid	Thomas	Cerulean Medical School								Endocrinology
Categorical	Ginger	Grant	Chartreuse School of Medicine								Primary Care
Categorical	Thurston	Howell, III	Coral Medical School								Neurology
Categorical	Eunice	Howell, III	Cyan School of Medicine								Neurology
Categorical	Vixen	Martinez	Orange Medical School								Primary Care
Categorical	Mary Ann	Summers	Orange Medical School								Primary Care
Categorical	Dasher	Garcia	Orange Medical School								Not Yet Decided
Categorical	Dancer	Rodriguez	Orange Medical School								Primary Care
Categorical	Happy	Johnson	Orange Medical School								Neurology
Categorical	Moe	Howard	Orange Medical School								Not Yet Decided
Categorical	Bashful	Miller	Orange Medical School								Primary Care
Categorical	Willy	Gilligan	Red School of Medicine								Geriatrics
Categorical	Dopey	Brown	State University of Green								Pulmonary/Critical Care
Categorical	Skipper	Grumby	State University of Indigo								Rheumatology
Categorical	Doc	Davis	State University of Magenta								Primary Care
Categorical	Professor	Hinkley	State University of Maroon							X	Gastroenterology
Categorical	Lucy	McGillicuddy	State University of Olive	55	262	262				X	Primary Care
Categorical	Prancer	Wilson	State University of Orange	19	264	262					Rheumatology
Categorical	Larry	Fine	State University of Orchid	37	253	251				X	Primary Care
Categorical	Comet	Taylor	State University of Peach	25	234	232					Cardiology
Categorical	Sleepy	Smith	State University of Red	1	275	273	X				Cardiology
Categorical	Blitzen	Moore	State University of Red	31	204	202	X	X			Pulmonary/Critical Care
Categorical	Rudolph	Martin	Turquoise Medical School	33	273	271					Infectious Disease

How many different schools matched into your program? Are you matching a large number of applicants from a particular school? Use this information when making your rank list to try to obtain a variety of medical schools.

# Faculty Interviewers

- Pick the appropriate faculty to interview applicants
  - Faculty that are familiar with the residency program
  - Make sure they are able to answer the most commonly asked questions
- If possible, pair interviewers with applicants that share common interests or have come from the same medical school
- Have interviewers with a good “applicant match rate” interview as much as possible



# Applicants Matched by Interviewer

Is there a trend of certain interviewers matching more applicants?



Categorical Matched Applicants by Interviewers			Interviewer
Sleepy	Smith	State University of Red	Dr. Seuss
Happy	Johnson	Orange Medical School	Dr. McStuffins
Grumpy	Williams	Yellow School of Medicine	Dr. Oz
Dopey	Brown	State University of Green	Dr. Spock
Sneezy	Jones	Blue Medical School	Dr. Zhivago
Bashful	Miller	Purple School of Medicine	Dr. Frankenstein
Doc	Davis	State University of Magenta	Dr. Doolittle
Dasher	Garcia	Grey Medical School	Dr. Jekyll
Dancer	Rodriguez	Lavender School of Medicine	Dr. Jones
Prancer	Wilson	State University of Orange	Dr. Spock
Vixen	Martinez	Green Medical School	Dr. Seuss
Donner	Anderson	Aqua School of Medicine	Dr. Frankenstein
Comet	Taylor	State University of Peach	Dr. Jekyll
Cupid	Thomas	Cerulean Medical School	Dr. Spock
Donner	Hernandez	Aqua School of Medicine	Dr. Zhivago
Blitzen	Moore	State University of Red	Dr. Frankenstein
Rudolph	Martin	Turquoise Medical School	Dr. Spock
Curly	Howard	Violet School of Medicine	Dr. Spock
Larry	Fine	State University of Orchid	Dr. Frankenstein
Moe	Howard	Orange Medical School	Dr. Seuss
Willy	Gilligan	Red School of Medicine	Dr. McStuffins
Skipper	Grumby	State University of Indigo	Dr. Zhivago
Mary Ann	Summers	Green Medical School	Dr. Doolittle
Ginger	Grant	Chartreuse School of Medicine	Dr. McStuffins
Professor	Hinkley	State University of Maroon	Dr. Frankenstein
Thurston	Howell, III	Coral Medical School	Dr. Seuss
Eunice	Howell, III	Cyan School of Medicine	Dr. Zhivago
Lucy	McGillicuddy	State University of Olive	Dr. Jekyll
Ricky	Ricardo	Bisque Medical School	Dr. Seuss

# Important Points

- Make sure that your website is up-to-date
  - Highlight your program's strengths
    - Fellowship match information
  - Include pertinent information
    - FAQs
    - Application requirements
    - Contact information
- Resident interaction is very important
  - Make sure there are many residents present throughout the interview day
  - Have your more outgoing residents give the tours



# Questions



# Contact Information

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