# Provider Ratings and Patient, Disease, and Appointment Factors

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#### Financial Disclosure

Consultant: Allergan, Alcon, Novartis, Zeiss

## Summary

- Patient experience affects patient engagement, compliance, readmission rates as well as financial and reputational success of medical institutions
- Factors associated with higher provider rating: male and optometric providers; older patients' age; better visual acuity; eye refraction/imaging/minor procedures performed; surgery scheduled; higher appointment attendance rate; higher survey completion rate
- Lower provider rating: new patient visit; comprehensive, cornea or glaucoma providers; longer survey response time

# Why is Patient Experience Important?

- Patient engagement, compliance, readmission rates
- Financial and reputational success of medical institutions

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#### Aleksandra Rachitskaya, MD | Cleveland Clinic

Find professional and biographical information about Cleveland Clinic physician Aleksandra Rachitskaya, MD.

\*\*\*\* Rating: 4.9 - 444 votes

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#### Patient ratings for Aleksandra Rachitskaya, Beachwood, OH

Read patient ratings of Aleksandra Rachitskaya, practicing Ophthalmology doctor in Beachwood, OH.

\*\*\*\* Rating: 4.3 - 6 votes

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#### Dr. Aleksandra Rachitskaya, MD - Reviews - Miami, FL

See what patients have to say about Dr. Aleksandra Rachitskaya, MD, a highly rated Ophthalmology Specialist in Miami, FL specializing in Eye Cancer, Retina ...

\*\*\*\* Rating: 5 - 1 review

#### About Dr. Aleksandra V Rachitskaya мр

Dr. Aleksandra V Rachitskaya, MD is a doctor primarily located in Beachwood, OH, with another office in Cleveland, OH. Their specialties include Ophthalmology.

#### Rating Overview

4 Ratings with 1 Comment

5.0 \*\*\*\* The overall average patient rating of Aleksandra V Rachitskaya is Excellent. Aleksandra V Rachitskaya has been rated by 4 patients.From those 4 patients 1 of those left a comment along with their

# Purpose

 To examine socio-demographic, disease, appointment, management, and survey factors that may influence overall provider ratings in a tertiary ophthalmology center

#### Methods

- Consumer Assessment of Healthcare Providers and Systems (CAHPS) group of surveys standardized assessment of the patient experience
- Clinician and Group (CG) CAHPS specific for an office setting
  - 31 items: demographic information, assessment of different areas of the patient experience in addition to overall provider rating

#### Methods

- Overall provider rating was answered on a rating scale (0-10)
  - converted to a binary variable for the purpose of this study: perfect or top box score (10) or non-perfect score (≤9)

#### Methods

 Ophthalmology patients surveyed at the Cole Eye Institute, Cleveland Clinic, from January 2017 to January 2019

#### Results

- 29,857 ophthalmology patient surveys
- 73.4% of the included surveys scored a perfect 10 for overall provider rating

## Patient Factors

Variable	Mean/Count	Unit Odds Ratio (95% CI)	Odds Ratio (95% CI)	ROC AUC	p-value
Patient Age (years)	62.877±14.424	1.012 (1.01-1.013)	2.633 (2.278-3.043)	0.54635	< 0.0001
Male Patient Gender	11829 (39.62%)		1.014 (0.962-1.068)		0.613
White Patient Race	25791 (86.38%)		1.183 (1.099-1.272)		< 0.0001
Distance (miles)	22.824±20.448	1.001 (1-1.002)	1.241 (0.928-1.658)	0.5112	0.1448
Income (× poverty level)	3.061±0.788	1.008 (0.975-1.042)	1.033 (0.904-1.18)	0.50086	0.6362
Payors					< 0.0001
Medicaid	1697 (5.68%)		0.794 (0.714-0.883)		< 0.0001
Medicare	12798 (42.86%)		1.252 (1.189-1.32)		< 0.0001
Commercial	15362 (51.45%)		0.846 (0.803-0.891)		< 0.0001

## Provider Factors

Variable	Mean/Count	Unit Odds Ratio (95% CI)	Odds Ratio (95% CI)	ROC AUC	p-value
Male provider Gender	21668 (72.57%)		1.087 (1.027-1.151)		0.0040
Attending Provider	29739 (99.6%)		1.074 (0.718-1.606)		0.7289

#### Disease Factors

Mean/Count	Unit Odds Ratio (95% CI)	Odds Ratio (95% CI)	ROC AUC	p-value
81.413±7.439	1.002 (0.998-1.005)	1.2 (0.851-1.692)	0.50176	0.2977
				< 0.0001
3184 (10.66%)		1.166 (1.07-1.27)		0.0004
8629 (28.9%)		1.141 (1.077-1.209)		< 0.0001
9543 (31.96%)		0.942 (0.892-0.996)		0.0341
3299 (11.05%)		0.871 (0.804-0.944)		0.0007
1923 (6.44%)		0.764 (0.692-0.844)		< 0.0001
992 (3.32%)		1.1 (0.95-1.274)		0.2014
	81.413±7.439 3184 (10.66%) 8629 (28.9%) 9543 (31.96%) 3299 (11.05%) 1923 (6.44%)	81.413±7.439 1.002 (0.998-1.005)  3184 (10.66%) 8629 (28.9%) 9543 (31.96%) 3299 (11.05%) 1923 (6.44%)	81.413±7.439 1.002 (0.998-1.005) 1.2 (0.851-1.692)  3184 (10.66%) 1.166 (1.07-1.27) 8629 (28.9%) 1.141 (1.077-1.209) 9543 (31.96%) 0.942 (0.892-0.996) 3299 (11.05%) 0.871 (0.804-0.944) 1923 (6.44%) 0.764 (0.692-0.844)	81.413±7.439 1.002 (0.998-1.005) 1.2 (0.851-1.692) 0.50176  3184 (10.66%) 1.166 (1.07-1.27) 8629 (28.9%) 1.141 (1.077-1.209) 9543 (31.96%) 0.942 (0.892-0.996) 3299 (11.05%) 0.871 (0.804-0.944) 1923 (6.44%) 0.764 (0.692-0.844)

# Appointment Factors

Variable	Mean/Count	Unit Odds Ratio (95% CI)	Odds Ratio (95% CI)	ROC AUC	p-value
SDA	2402 (8.05%)		0.909 (0.828-0.997)		0.0429
Rescheduled	3407 (11.41%)		0.988 (0.912-1.071)		0.7697
New Encounter	9786 (32.96%)		0.607 (0.575-0.64)		< 0.0001
General Attendance*	0.993±0.016	26.744 (5.895-121.32)	5.171 (2.428-11.015)	0.50671	< 0.0001
Ophthalmology Attendance*	0.998±0.016	0.693 (0.132-3.63)	0.832 (0.363-1.905)	0.50036	0.6638
Orders					
Consults	37 (0.12%)		1.125 (0.531-2.386)		0.758
Dilation	14809 (49.6%)		1.121 (1.065-1.18)		< 0.0001
Eye Testing	11554 (38.7%)		1.108 (1.051-1.168)		0.0002
Lab Testing	270 (0.9%)		0.772 (0.597-0.998)		0.0479
Medical Imaging	272 (0.91%)		1.005 (0.766-1.317)		0.9733
Procedure	1452 (4.86%)		1.242 (1.096-1.408)		0.0007
Refraction	7654 (25.64%)		1.064 (1.002-1.128)		0.0416
Surgery Scheduled	1151 (3.86%)		1.017 (0.89-1.163)		0.8009

# Survey Factors

Variable	Mean/Count	Unit Odds Ratio (95% CI)	Odds Ratio (95% CI)	ROC AUC	p-value
Time to Response (days)	$8.16\pm6.266$	0.991 (0.987-0.994)	0.468 (0.342-0.641)	0.52597	<0.0001
Fraction of Survey Completed*	$0.964\pm0.072$	5.981 (4.236-8.443)	1.815 (1.618-2.036)	0.52743	< 0.0001

# Multivariate Analysis Patient, Disease, and Appointment Factors and Top Box Score Provider Rating

Variable	Unit Odds Ratio (95%CI)	Odds Ratio (95%CI)	p-value
Intercept			< 0.0001
Patient Age (years)	1.011 (1.009-1.013)	2.442 (2.076-2.874)	< 0.0001
BCVA (ETDRS letters)	1.006 (1.003-1.01)	1.853 (1.303-2.635)	0.0006
Male Provider Gender		1.105 (1.039-1.175)	0.0014
Departments			
Optometry		1.25 (1.151-1.358)	< 0.0001
Comprehensive		0.861 (0.789-0.938)	0.0007
Cornea		0.789 (0.712-0.874)	< 0.0001
Glaucoma		0.664 (0.592-0.746)	< 0.0001
New Encounter		0.618 (0.584-0.654)	< 0.0001
General Attendance*	7.058 (1.507-33.06)	2.657 (1.228-5.75)	0.0131
Orders			
Eye Testing		1.061 (1.001-1.125)	0.0476
Procedure		1.189 (1.037-1.364)	0.0133
Refraction		1.162 (1.08-1.25)	< 0.0001
Surgery Scheduled		1.184 (1.028-1.364)	0.0195
Time to Response (days)	0.989 (0.985-0.993)	0.417 (0.302-0.575)	< 0.0001
Fraction of Survey Completed*	8.2 (5.737-11.721)	2.017 (1.79-2.272)	< 0.0001

# Provider Ratings and Patient, Disease, and Appointment Factors

#### **Higher odds of TBS**

- Provider: male
- Patient: older age, higher appointment attendance
- Disease: better visual acuity, optometry
  - Visit: eye refraction/imaging/minor procedures performed, surgery scheduled
  - Survey: higher survey completion rate

#### **Lower odds of TBS**

- Disease: comprehensive, cornea or glaucoma providers
  - Visit: new patient
  - Survey: longer survey response time

#### Conclusion

- In addition to the modifiable factors like improving physician communication skills, there are nonmodifiable patient- and provider-specific as well as disease- and treatment-specific variables that providers cannot always control
- Some of these, such as provider gender, may be important confounders that need to be controlled for in the assessment of patient satisfaction scores and addressed through education and attention to implicit bias

# Thank you

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