



# 2021 National Telehealth Survey Report - Allergy/Immunology

Prepared for:



American  
**College**  
of Allergy, Asthma  
& Immunology

# AMA Telehealth Survey

**Survey summary:** This survey of physicians aimed to gather insights on the experiences of current and expected future use to inform ongoing telehealth research and advocacy, resource development, and continued support for physicians, practices, and health systems.

**Data collection:** The anonymous online survey was distributed to a convenience sample via email and social media by individuals, state and specialty medical organizations, and members of the American Medical Association Telehealth Immersion Program. The survey was active for 8 weeks between November 1, 2021, through December 31, 2021.

**Specialized Report:** This specialized report was prepared by the AMA for the American College of Allergy, Asthma, & Immunology, a Telehealth Immersion Program collaborator. Responses described in this report represent the 136 physician participants that identified their specialty as Allergy / Immunology. For the full report, visit us at: <https://www.ama-assn.org/practice-management/digital/telehealth-resource-center-research-findings>

**Report limitations and considerations:** The data presented in this report is based on a non-probability convenience sample. Results from this small sample should be considered directional and are not intended to suggest statistical significance or applicability to the general U.S. physician and healthcare professional population. Results in this specialty report are also not intended to generalize the specialty experience.

# Participant Characteristics



# Physician sample

N = 136 Physicians (MD/DO)

Specialty	N
Allergy / Immunology	136
Anesthesiology	-
Cardiology	-
Thoracic	-
Surgery Cardiovascular	-
Diseases Critical Care	-
Dentistry / Oral Surgery	-
Dermatology	-
Emergency Medicine	-
Endocrinology	-
Family Medicine	-
Gastroenterology	-
General Practice	-
Hematology / Oncology	-
Hospitalist	-
Infectious Disease	-
Internal Medicine, Primary Care	-
Mental/Behavioral Health	-
Nephrology	-
Neurological Surgery	-
Neurology	-
Obstetrics and Gynecology	-
Oncology	-

Specialty	N
Ophthalmology	-
Orthopedic Surgery	-
Otolaryngology	-
Palliative Care	-
Pathology	-
Pediatrics – Primary Care	-
Pediatrics – Hospitalist	-
Pediatrics – Procedural specialties	-
Pediatrics – Cognitive	-
Physical Medicine and Rehabilitation	-
Plastic Surgery	-
Psychiatry	-
Pulmonary Disease	-
Radiation Oncology	-
Radiology	-
Rheumatology	-
Surgery, General	-
Urological Surgery	-
Vascular Surgery	-
Other surgery-related specialty	-
Other non-surgery-related specialty	-
N/A	-
<b>Total N =</b>	<b>136</b>

Q2. Please indicate which of the following best describes your specialty.

# State of residence

State	N
Alabama	3
Alaska	4
Arizona	1
Arkansas	2
California	15
Colorado	1
Connecticut	5
Delaware	0
Florida	7
Georgia	8
Hawaii	0
Idaho	0
Illinois	4
Indiana	3
Iowa	1
Kansas	1
Kentucky	3
Louisiana	2
Maine	1
Maryland	4
Massachusetts	4
Michigan	3
Minnesota	1
Mississippi	1
Missouri	3
Montana	0

Specialty	N
Nebraska	3
Nevada	1
New Hampshire	2
New Jersey	3
New Mexico	1
New York	9
North Carolina	3
North Dakota	0
Ohio	6
Oklahoma	0
Oregon	1
Pennsylvania	5
Rhode Island	1
South Carolina	2
South Dakota	1
Tennessee	5
Texas	8
Utah	0
Vermont	0
Virginia	1
Washington	1
West Virginia	0
Wisconsin	3
Wyoming	0
Puerto Rico	0
U.S. Virgin Islands	0
<b>Total N =</b>	<b>133</b>

Q3. Please indicate which state you reside in.

# State licensed to practice

State	N
Alabama	3
Alaska	4
Arizona	1
Arkansas	4
California	17
Colorado	1
Connecticut	6
Delaware	1
Florida	8
Georgia	10
Hawaii	0
Idaho	0
Illinois	6
Indiana	8
Iowa	3
Kansas	2
Kentucky	4
Louisiana	3
Maine	2
Maryland	7
Massachusetts	4
Michigan	5
Minnesota	4
Mississippi	1
Missouri	7
Montana	1

Specialty	N
Nebraska	4
Nevada	1
New Hampshire	2
New Jersey	5
New Mexico	1
New York	12
North Carolina	5
North Dakota	0
Ohio	9
Oklahoma	0
Oregon	1
Pennsylvania	6
Rhode Island	1
South Carolina	2
South Dakota	1
Tennessee	6
Texas	9
Utah	0
Vermont	0
Virginia	4
Washington	1
West Virginia	0
Wisconsin	5
Wyoming	0
Puerto Rico	0
U.S. Virgin Islands	0
<b>Total N =</b>	<b>132</b>

Q4. Please indicate which state(s) in which you are licensed to practice medicine.

# Respondent Demographics

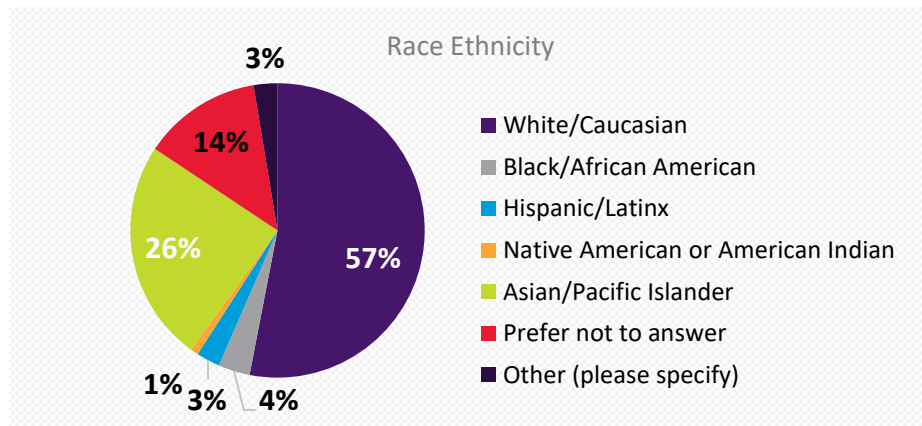
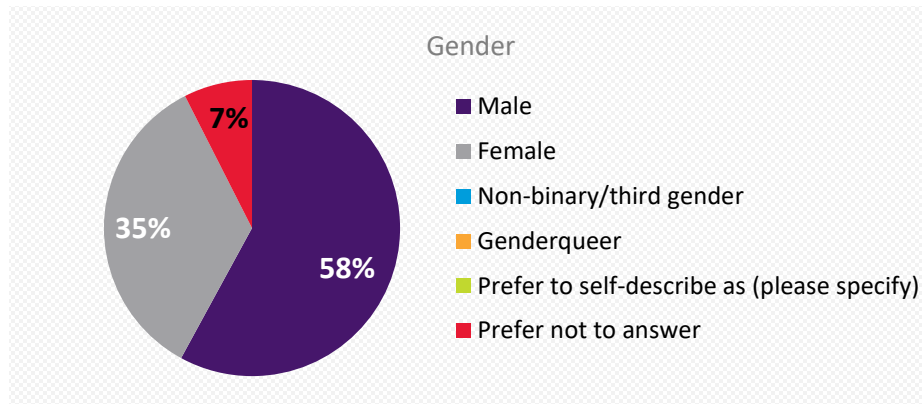
Age

Age Group	N	%
18 to 30	1	1%
31 to 40	13	12%
41 to 50	29	27%
51 to 64	27	25%
65 or older	26	25%
Prefer not to answer	10	9%

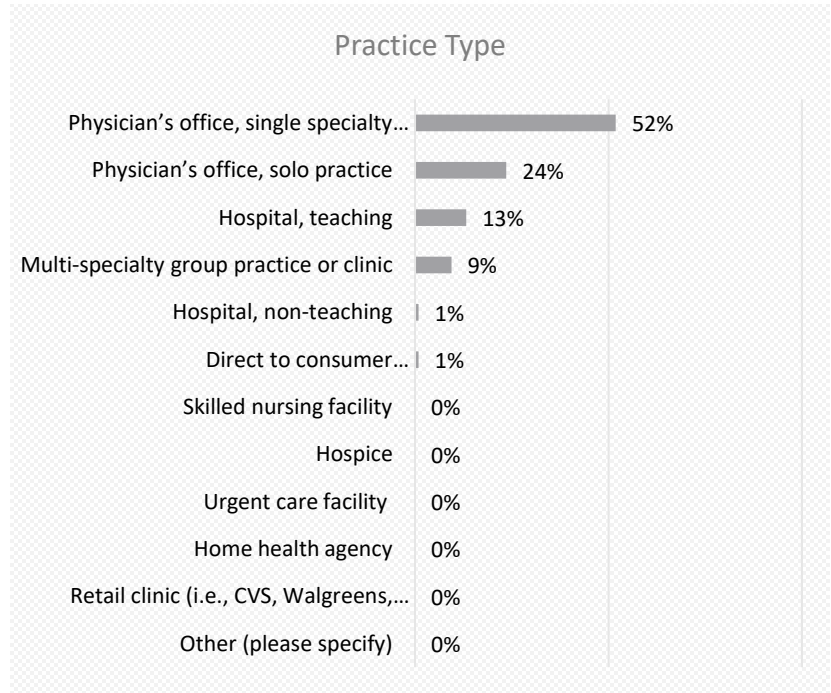
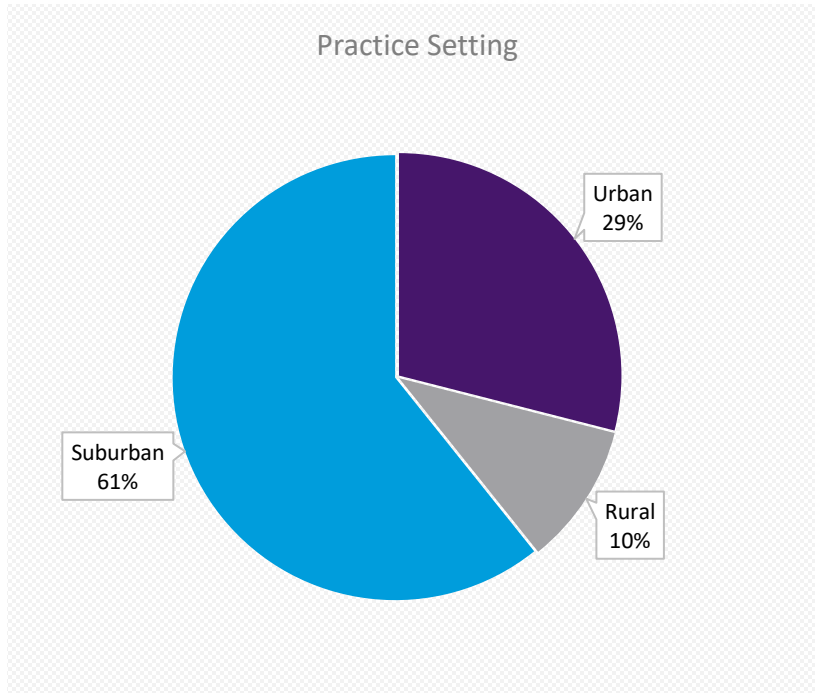
Q43. Please indicate your age. N=106

Q42. Please specify your gender. N=107

Q41. Please indicate your race/ethnicity (select all that apply). N=107



# Practice Attributes



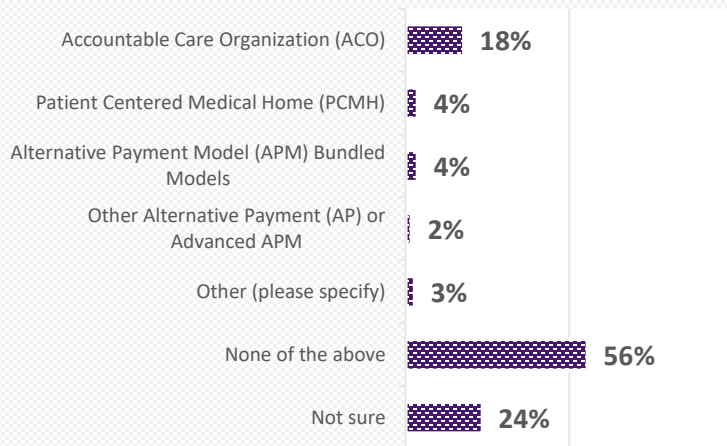
Q40. In what setting is your main/primary practice located? N=107

Q44. Which of the following best describes your main practice? N=106

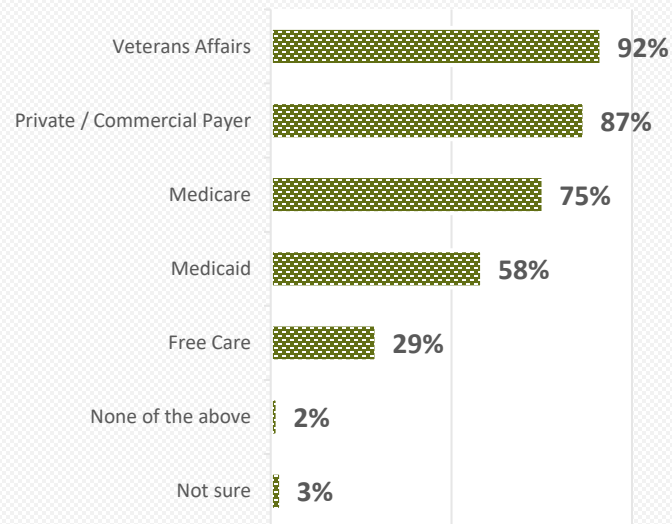


# Practice Attributes

Value-based care models or payment arrangements



Payers accepted



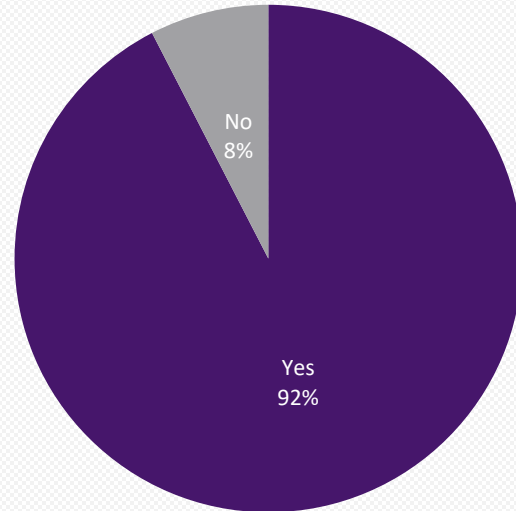
Q45. Please indicate if you participate in any value-based care models or payment arrangements. (select all that apply) N=106

Q46. Which of the following payers do you accept in your practice? (select all that apply) N=106

# Telehealth use

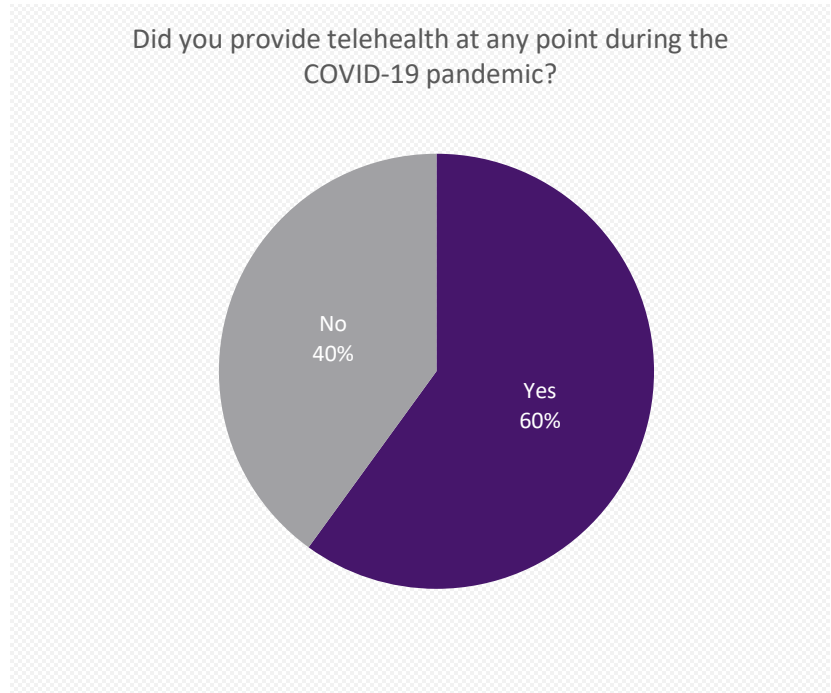


# 92% of respondents currently use telehealth



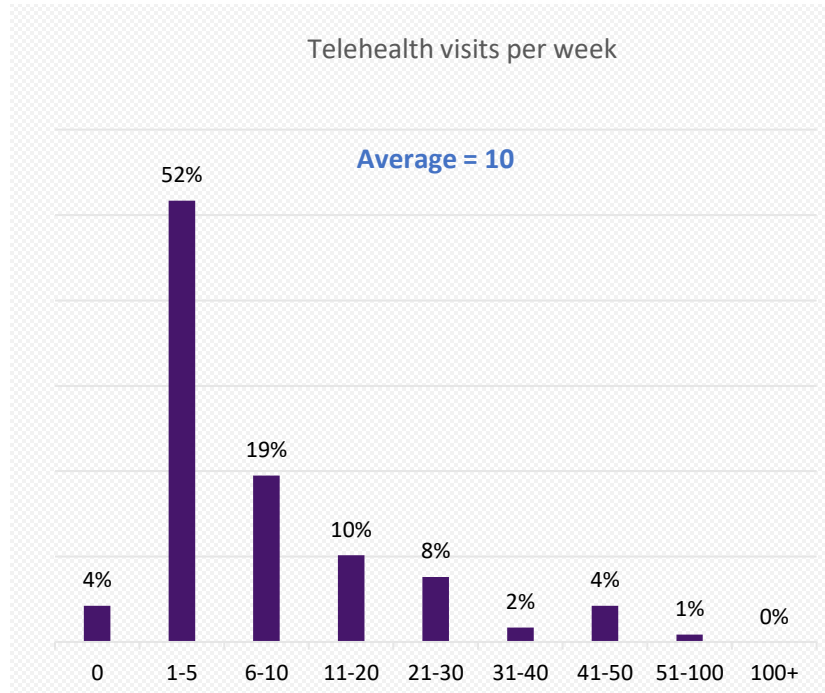
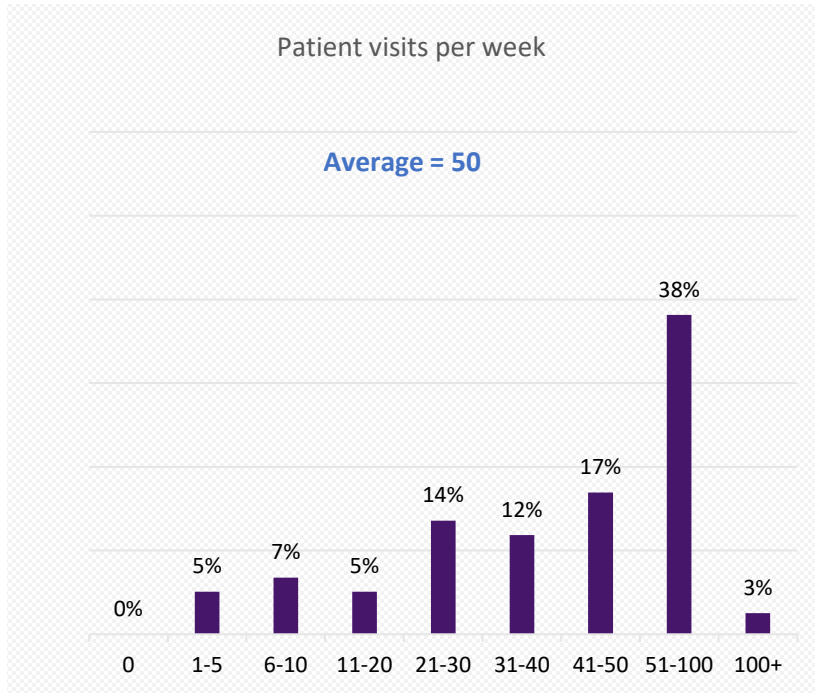
Q5. Do you currently use telehealth to care for your patients? N=132

# Of the few respondents (8%) that do not currently use telehealth, 40% did not provide telehealth during the pandemic



Q6. Please indicate why you do not use telehealth. (select all that apply) N=10  
 Q7. Did you provide telehealth at any point during the COVID-19 pandemic? N=10

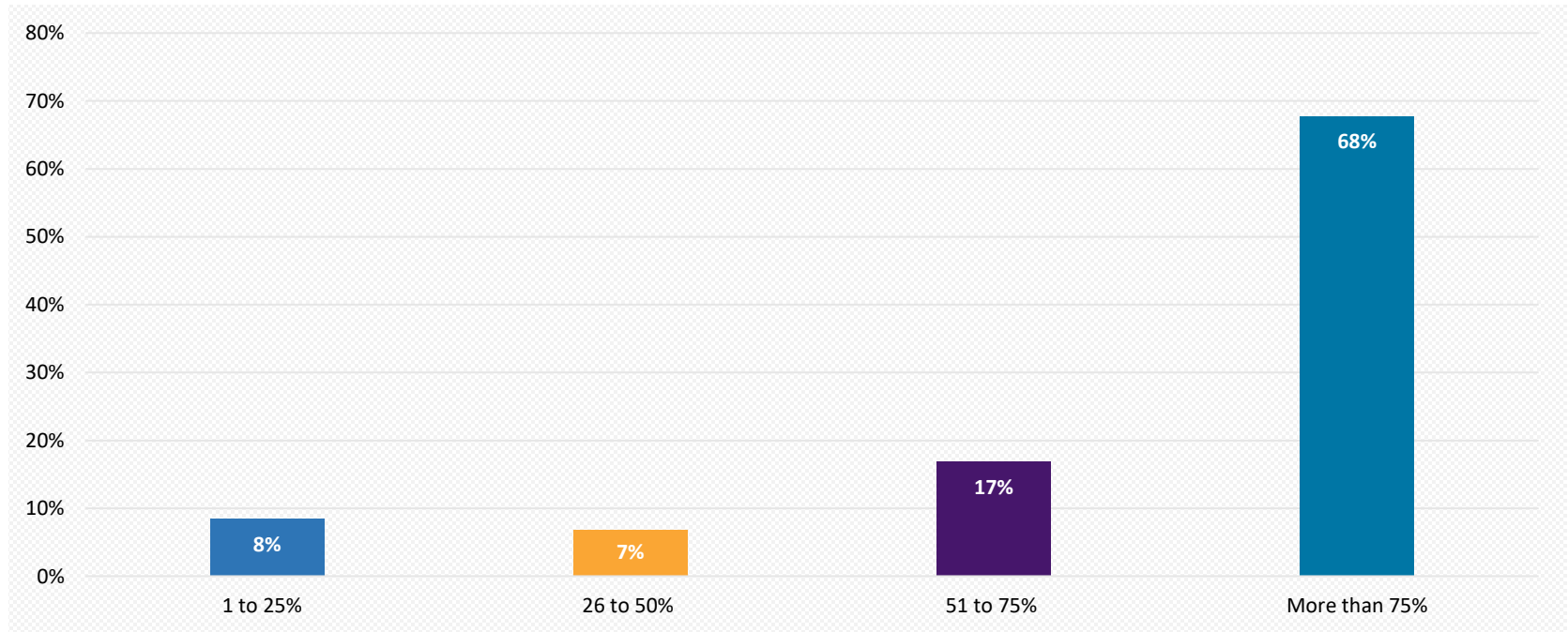
# On average, respondents indicate nearly 1 out every 5 patient visits are conducted via telehealth



Q10. On average, how many patient visits do you have per week, including in-person and telehealth? N=118

Q11. How many telehealth visits do you currently average per week? N=118

# Most respondents that use telehealth indicate that 75% or more of telehealth visits are with established patients



Q12. Currently, based on total volume of telehealth services delivered, what percent of your telehealth visits are with patients with whom you have an established patient/physician relationship? N=118

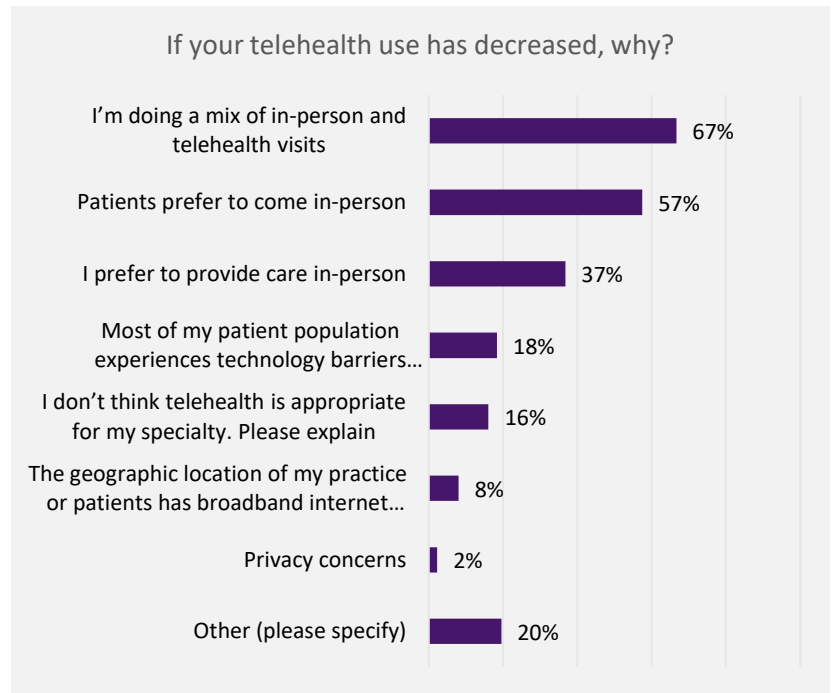
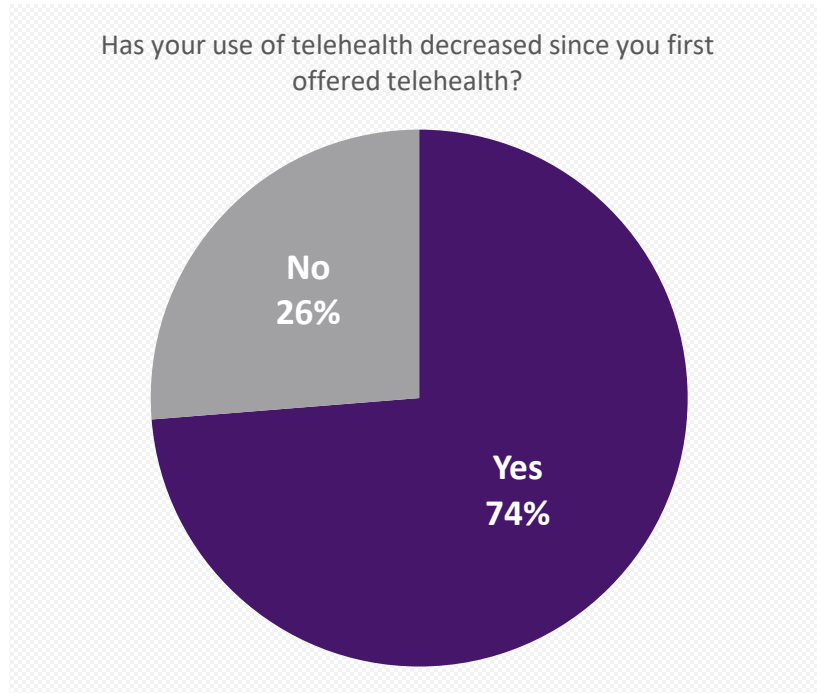
# State where telehealth services are provided

State	N
Alabama	1
Alaska	4
Arizona	1
Arkansas	0
California	15
Colorado	2
Connecticut	7
Delaware	0
Florida	8
Georgia	8
Hawaii	0
Idaho	2
Illinois	4
Indiana	4
Iowa	5
Kansas	3
Kentucky	5
Louisiana	2
Maine	2
Maryland	5
Massachusetts	5
Michigan	2
Minnesota	3
Mississippi	1
Missouri	4
Montana	0

Specialty	N
Nebraska	3
Nevada	2
New Hampshire	3
New Jersey	5
New Mexico	2
New York	10
North Carolina	2
North Dakota	1
Ohio	7
Oklahoma	0
Oregon	3
Pennsylvania	7
Rhode Island	2
South Carolina	1
South Dakota	2
Tennessee	5
Texas	10
Utah	0
Vermont	1
Virginia	2
Washington	1
West Virginia	2
Wisconsin	3
Wyoming	0
Puerto Rico	0
U.S. Virgin Islands	0
<b>Total N =</b>	<b>167</b>

Q13: Please indicate the state(s) in which you provide telehealth services. (select all that apply)

# Most respondents that report a decrease in use now provide a mix of in-person and virtual care



Q14. Has your use of telehealth decreased since you first offered telehealth services? N=118

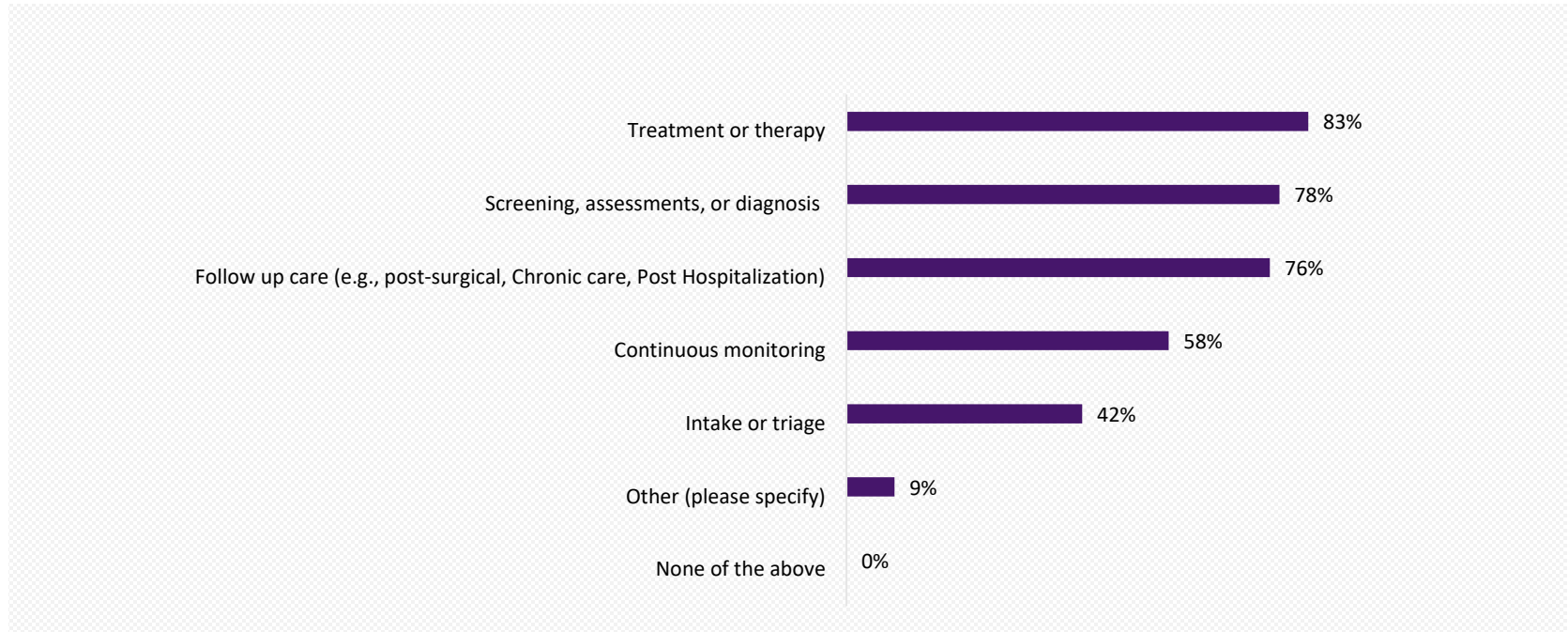
Q15. If your telehealth use has decreased, why? N=87



# A deeper dive into the telehealth experience

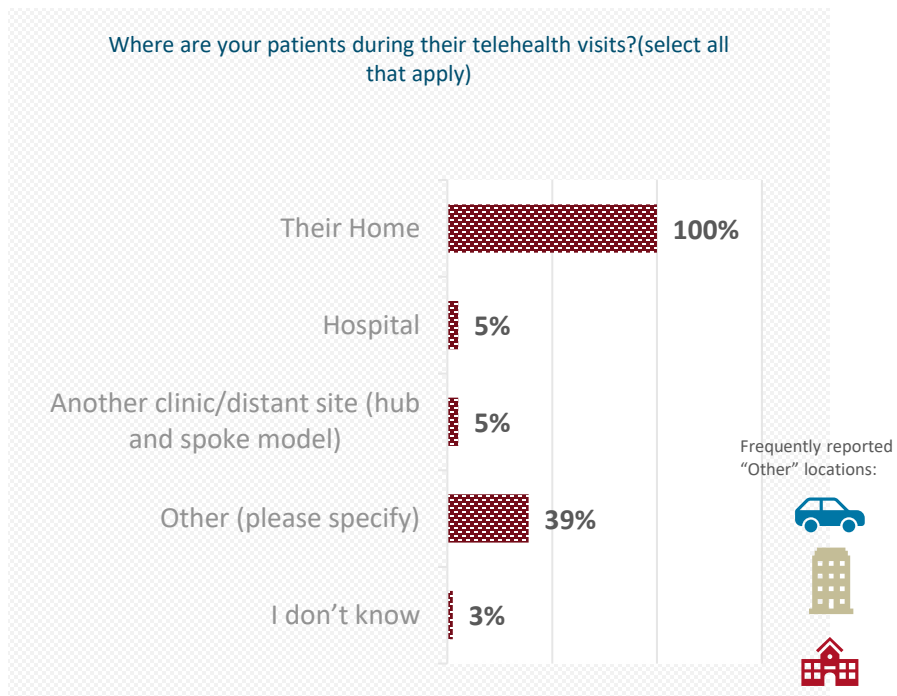
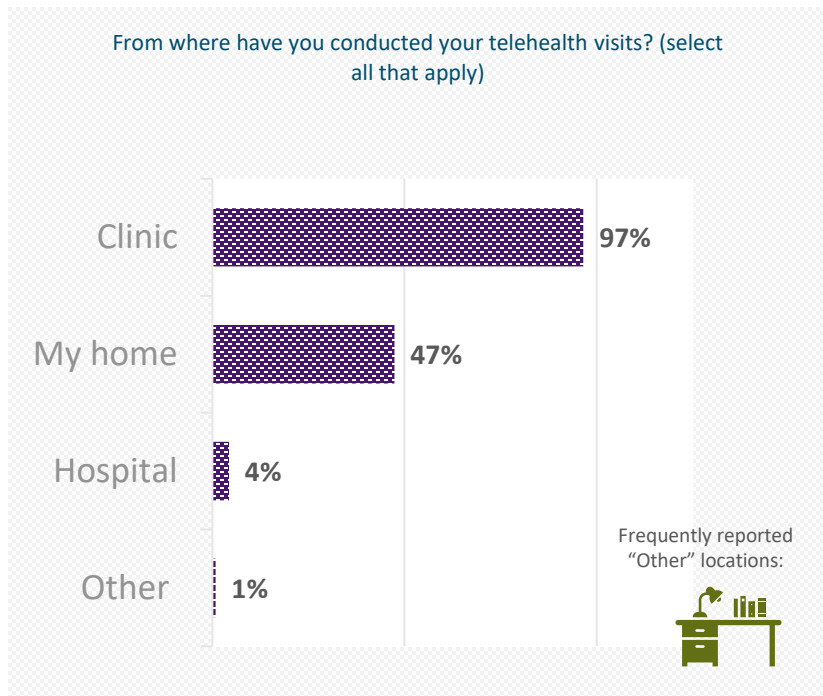


# According to respondents, telehealth is currently being used across many aspects of care



Q16. What aspects of care do you provide via telehealth? (select all that apply) N=116

# Telehealth visits are mostly conducted from the clinic, while patients are typically located in their home



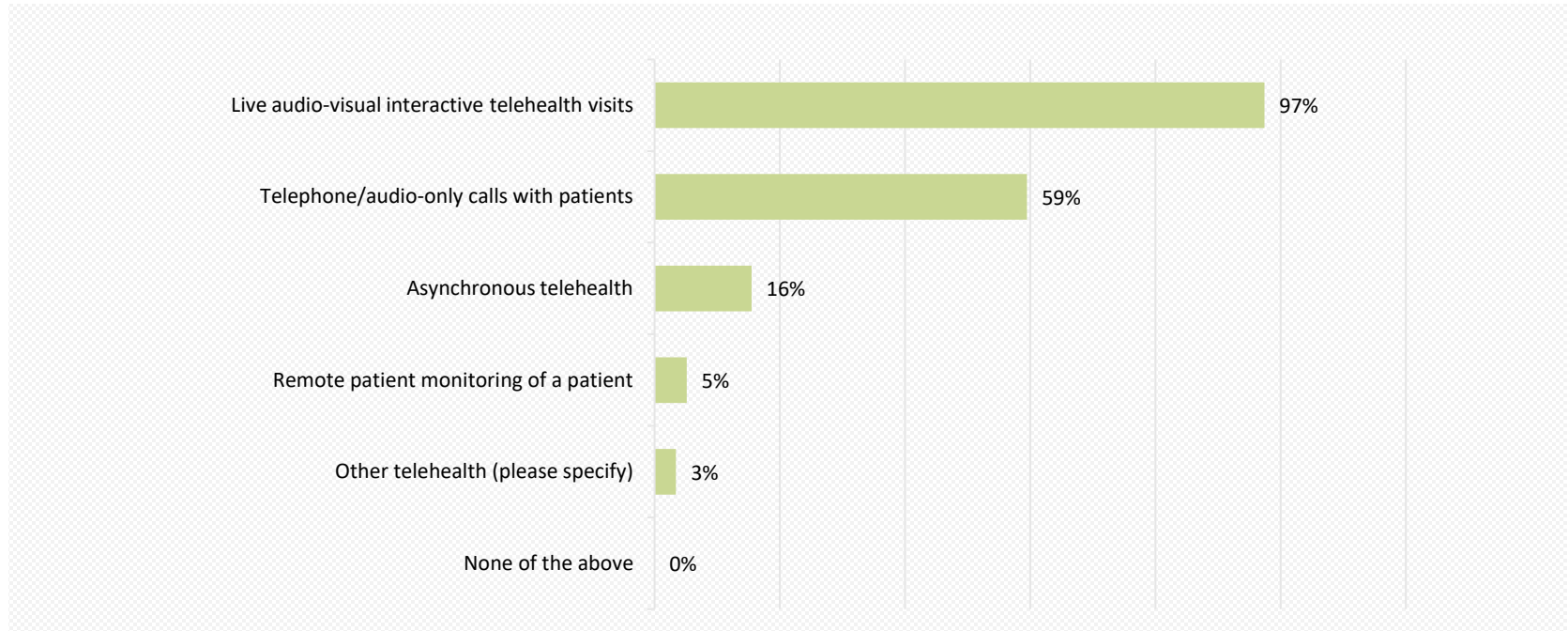
Q17. From where have you conducted your telehealth visits? (select all that apply) N=116

Q18. Where are your patients during their telehealth visits?(select all that apply) N=116

# Telehealth Technology

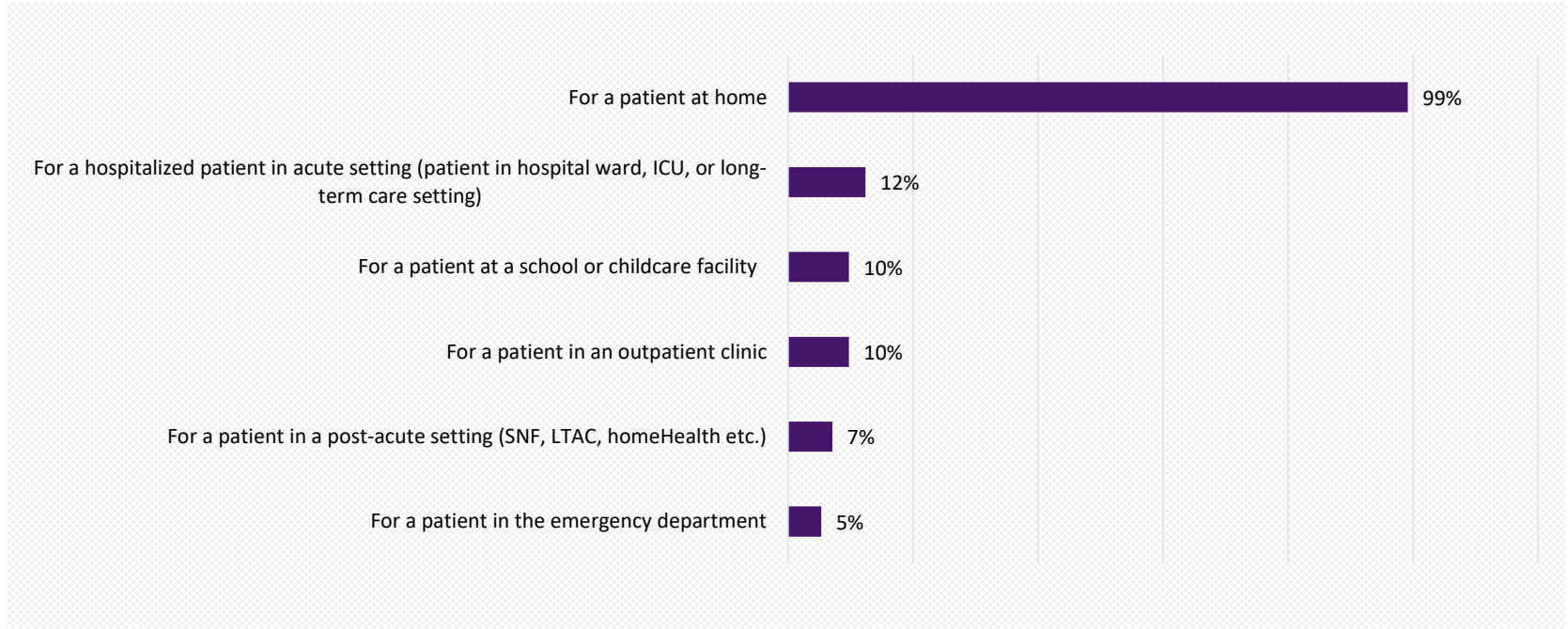


# Most allergy/immunology respondents use live audio-visual technology to deliver telehealth



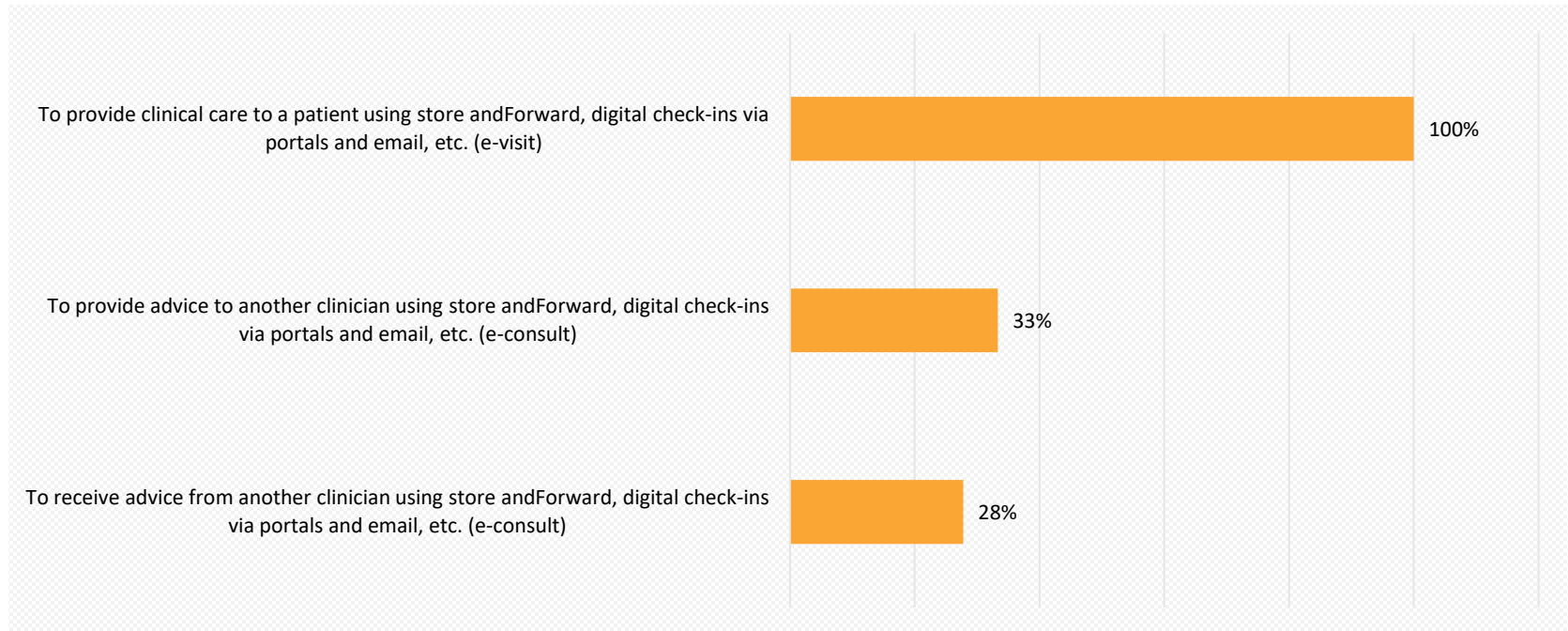
Q19. Which of the following telehealth modalities do you currently use to provide clinical care virtually to patients? (select all that apply) N=116

# Live audio-visual technology is predominately used to see patients at home



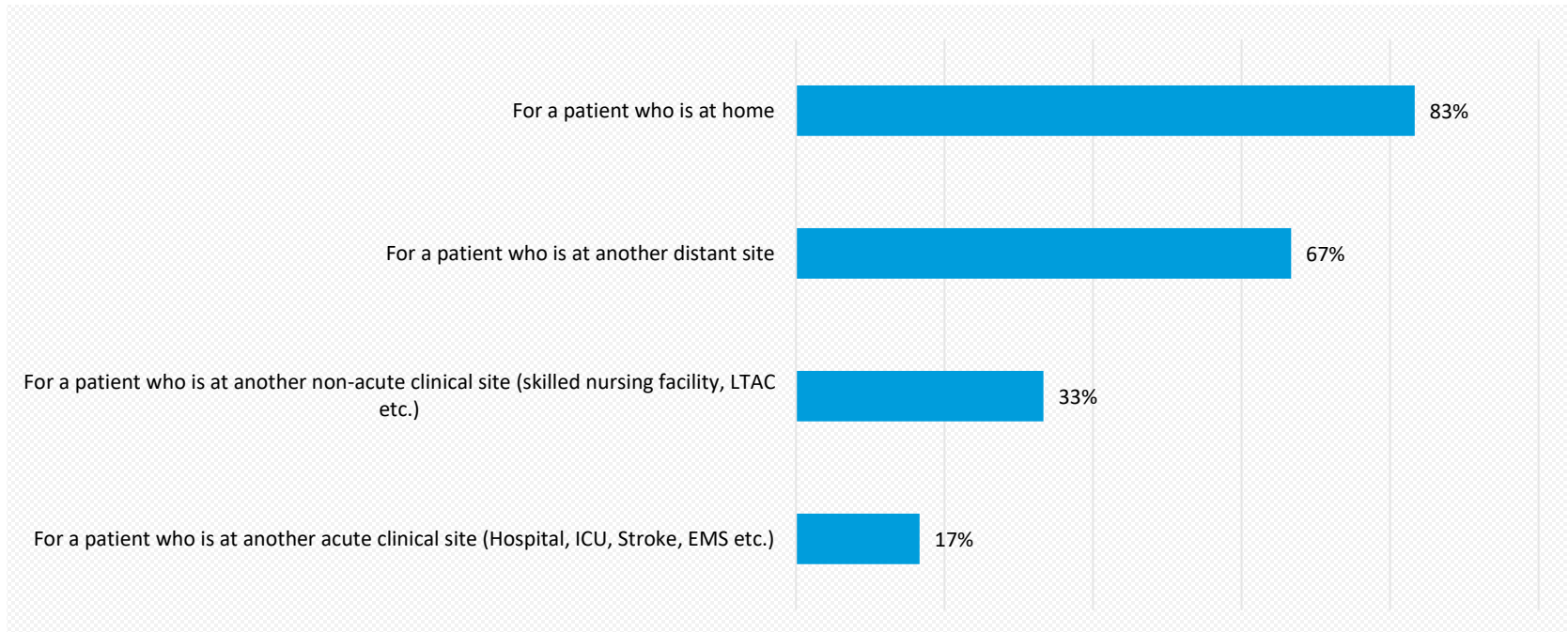
Q19a. For whom do you use live audio-visual interactive telehealth? N=113

# Asynchronous telehealth is mostly used for patient e-visits using store and forward, digital check-ins via patient portals, emails, etc.



Q19b. For what purpose do you use asynchronous telehealth? N=18

# Remote patient monitoring is mostly used to see a patients at home

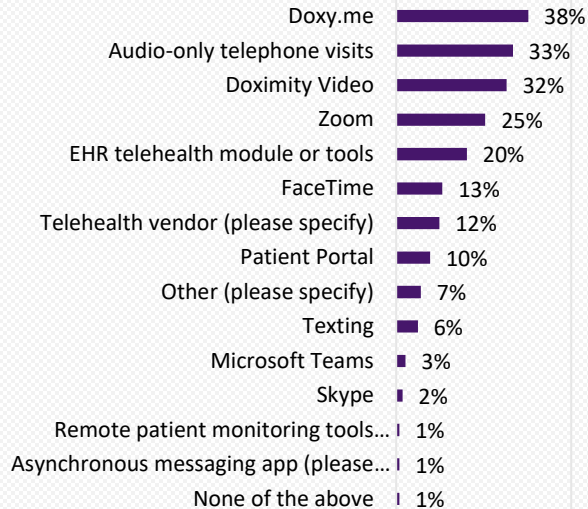


Q19c. For whom do you use remote patient monitoring? N=6

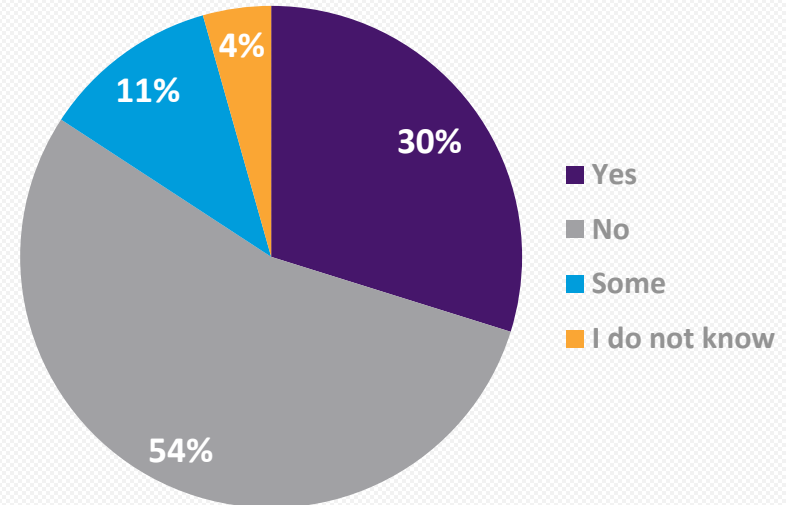


# Various platforms are used to deliver telehealth; some can access these platforms via the EHR

Which platform(s) do you use to deliver telehealth services?  
(select all that apply)



Are you able to access technology directly from your EHR?

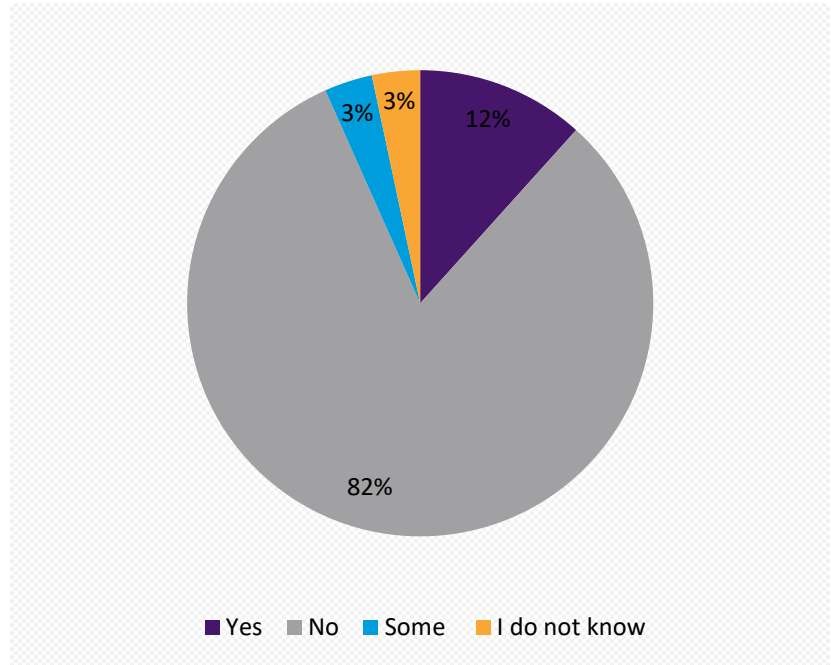
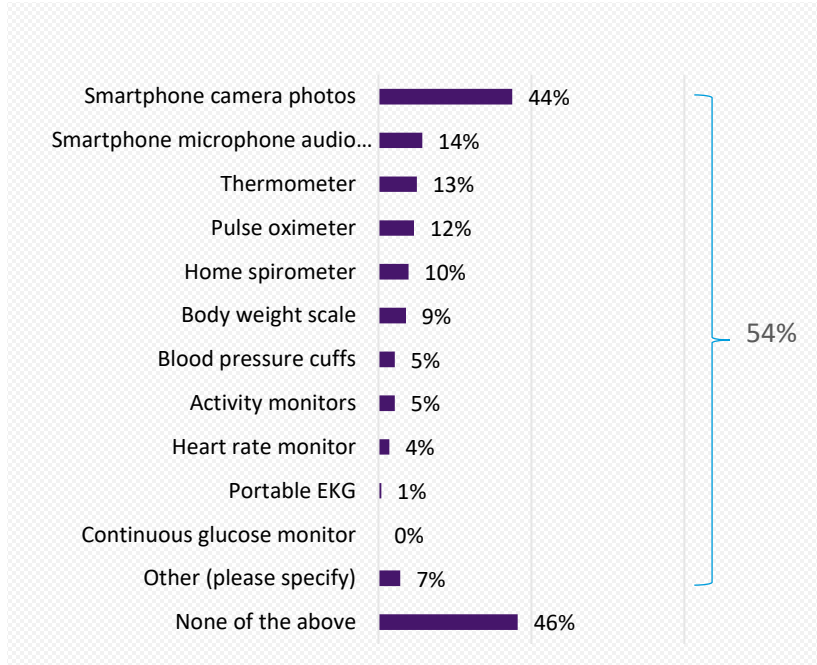


Q20. Which platform(s) do you use to deliver telehealth services? (select all that apply) N=114

Q21. Are you able to access your telehealth technology directly from your Electronic Health Record (EHR)? N=114

# Technology used to augment telehealth services

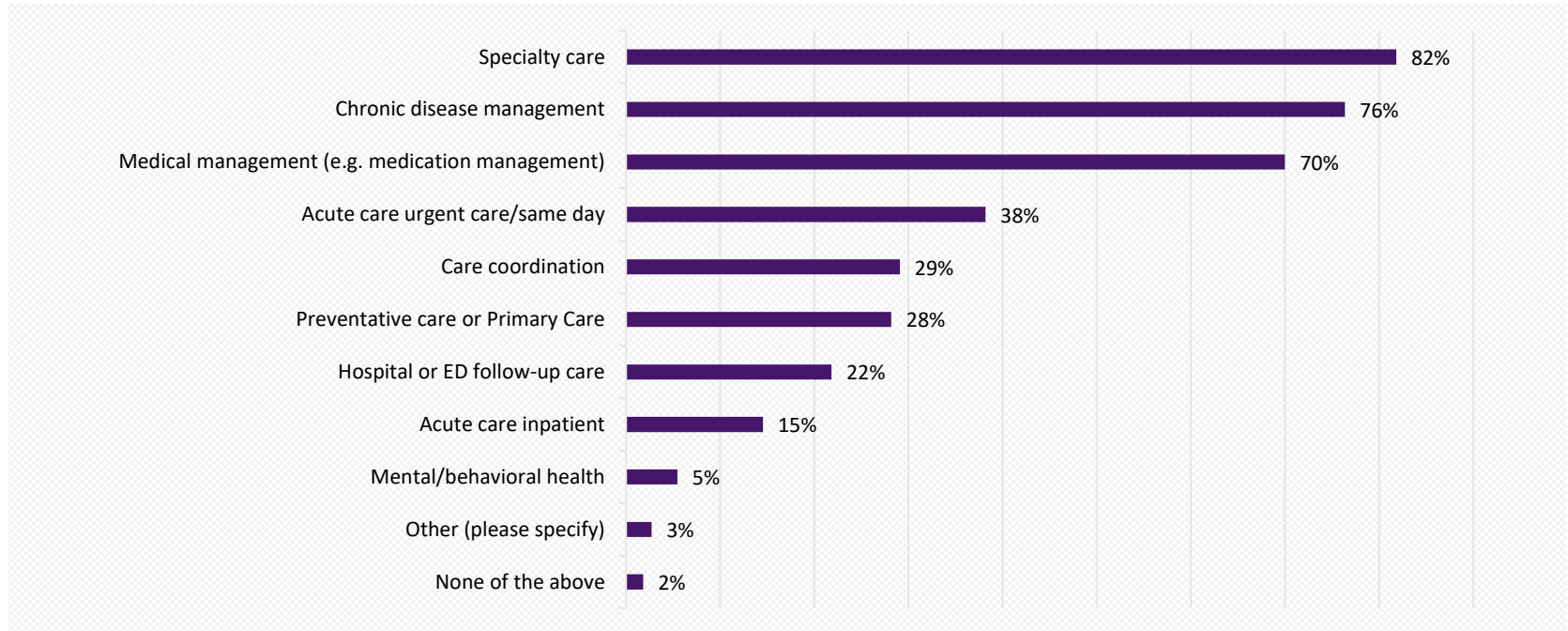
# 82% report data from support technology is not automatically transmitted



Q22. What type of technology are you using to support/augment your telehealth services? (Select all that apply) N=112

Q23. Do the devices you selected in the previous question automatically collect and deliver patient reported data to you? N=60

# Telehealth is used to deliver a variety of health care services



Q24. What services do you or your practice/organization currently provide via telehealth? N=110

# Most use cases for telehealth among allergy and immunology respondents are follow-up care

## Follow ups

*“Routine follow up patients”*

*“Uncomplicated routine follow-up for allergic rhinitis”*

*“Follow up of certain chronic conditions”*

*“Annual non-asthma follow-ups, new evaluations for out of town patients”*

*“New patient visits and follow up visits which are not likely to require any in office testing”*

*“Next day follow up for asthma exacerbation. Routine follow up for immunotherapy (allergy shots).”*

*“Follow up visits to see if medications need to be adjusted to control asthma and allergies”*

*“Follow up of uncomplicated patients.”*

*“Follow up visits for established patients who are coming from 2-3 hours away.”*

*“Regular follow up care without any major complications seemed appropriate enough to adopt telehealth, as long as the technology is readily, promptly, and flawlessly available.”*

## Patient Screening

*“Screening prior to seeing the patient in office to see if appropriate.”*

*“New patient histories to determine necessary evaluation testing ahead of physically seeing patient”*

## Covid Patients

*“Those in quarantine or isolation”*

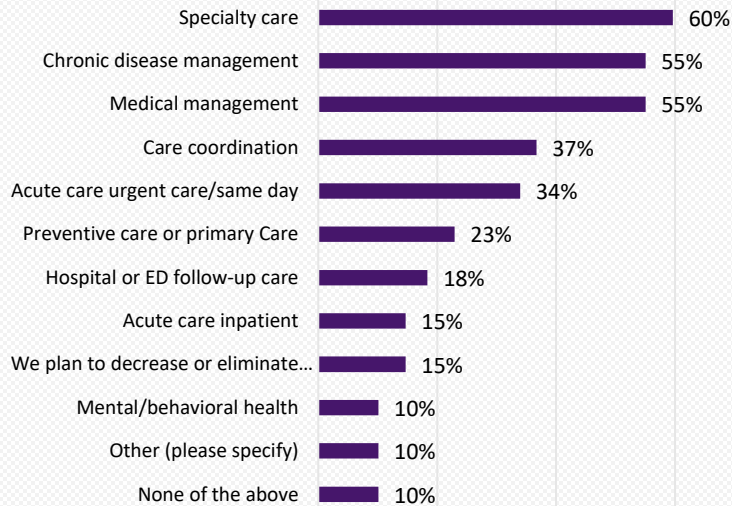
*“When someone thinks they may have COVID and I do not want them in my office”*

*“Covid cases; other acute respiratory infections”*

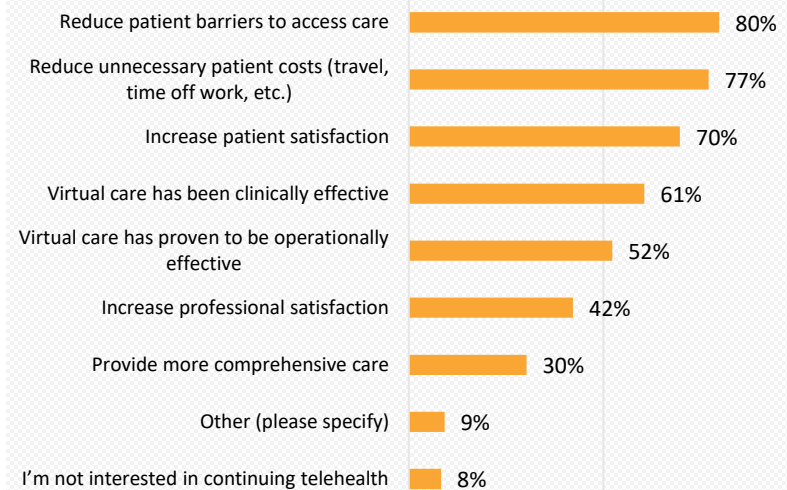
Q25. What specific use cases within your specialty do you find most appropriate for telehealth?

# Practices plan to offer a variety of services via telehealth in the future for a variety of reasons

What telehealth services does your practice or organization plan to offer in the future?



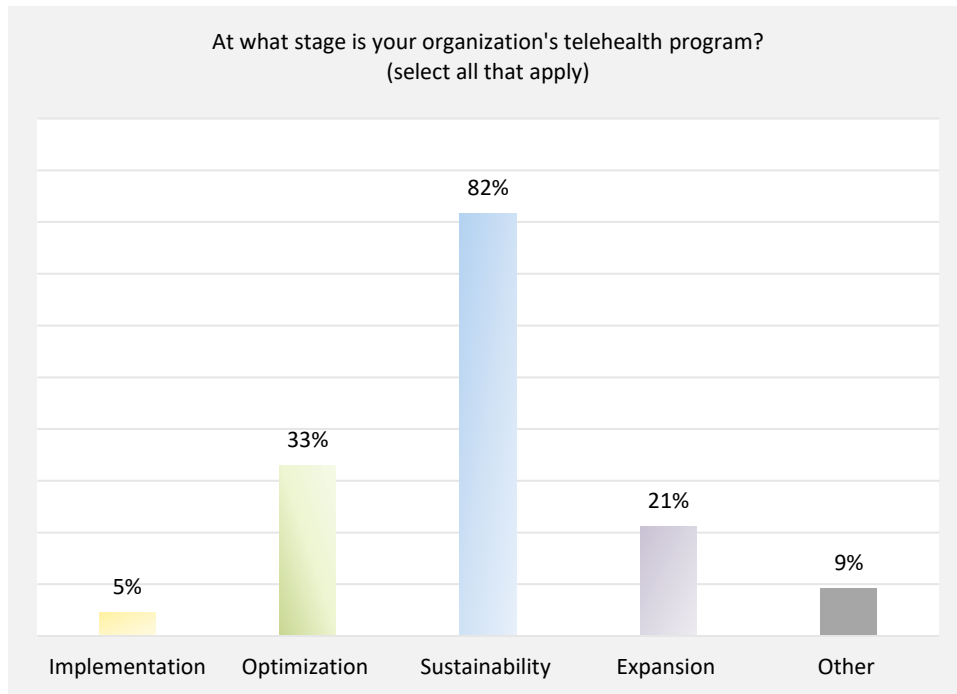
Which of the following are reasons why you are interested in continuing to provide care via telehealth?



Q26. What telehealth services does your practice or organization plan to offer in the future? (select all that apply) N=109

Q27. Which of the following are reasons why you are interested in continuing to provide care via telehealth? (select all that apply) N=109

# Most are focused on *sustaining* telehealth at their practice or organizations



**Implementation** = just getting started in implementing telehealth

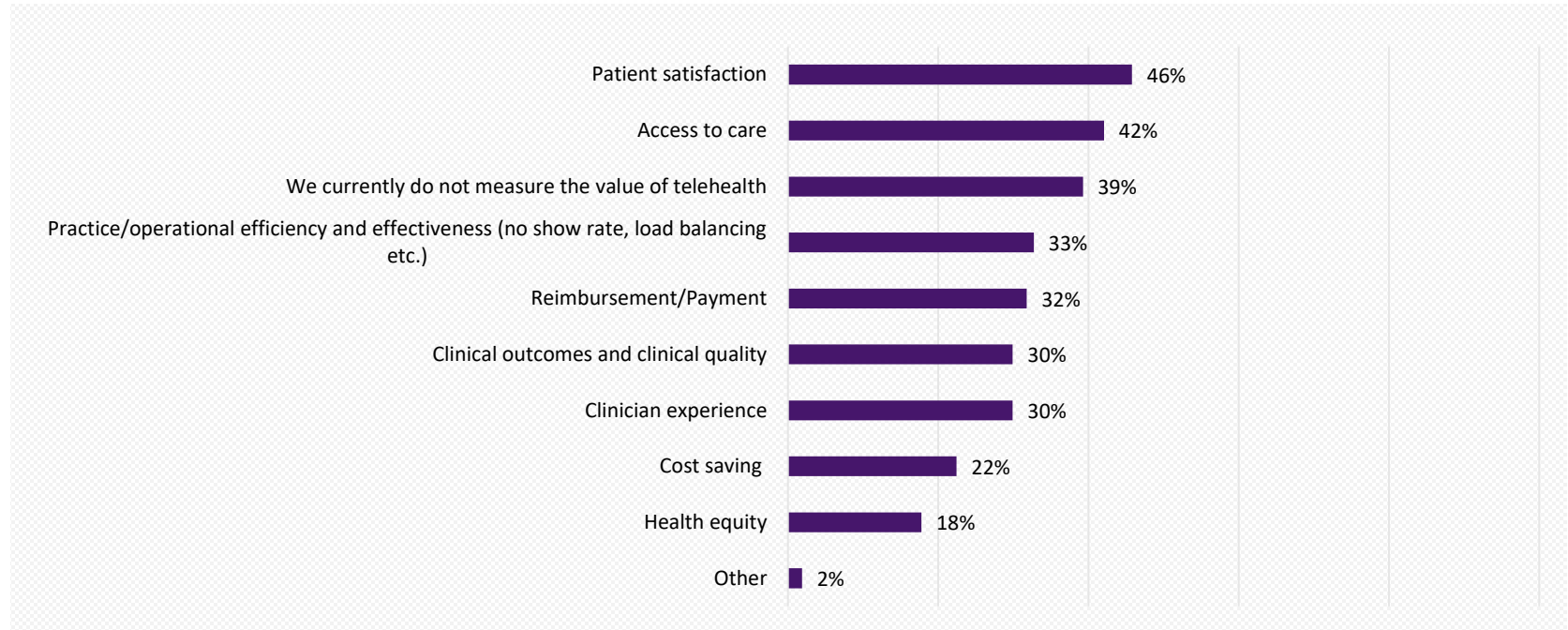
**Optimization** = looking to improve existing telehealth operations

**Sustainability** = interested in continuing to offer telehealth services that seamlessly integrate with in-person care

**Expansion** = looking to expand telehealth offerings for other services, additional locations, or more comprehensive virtual care

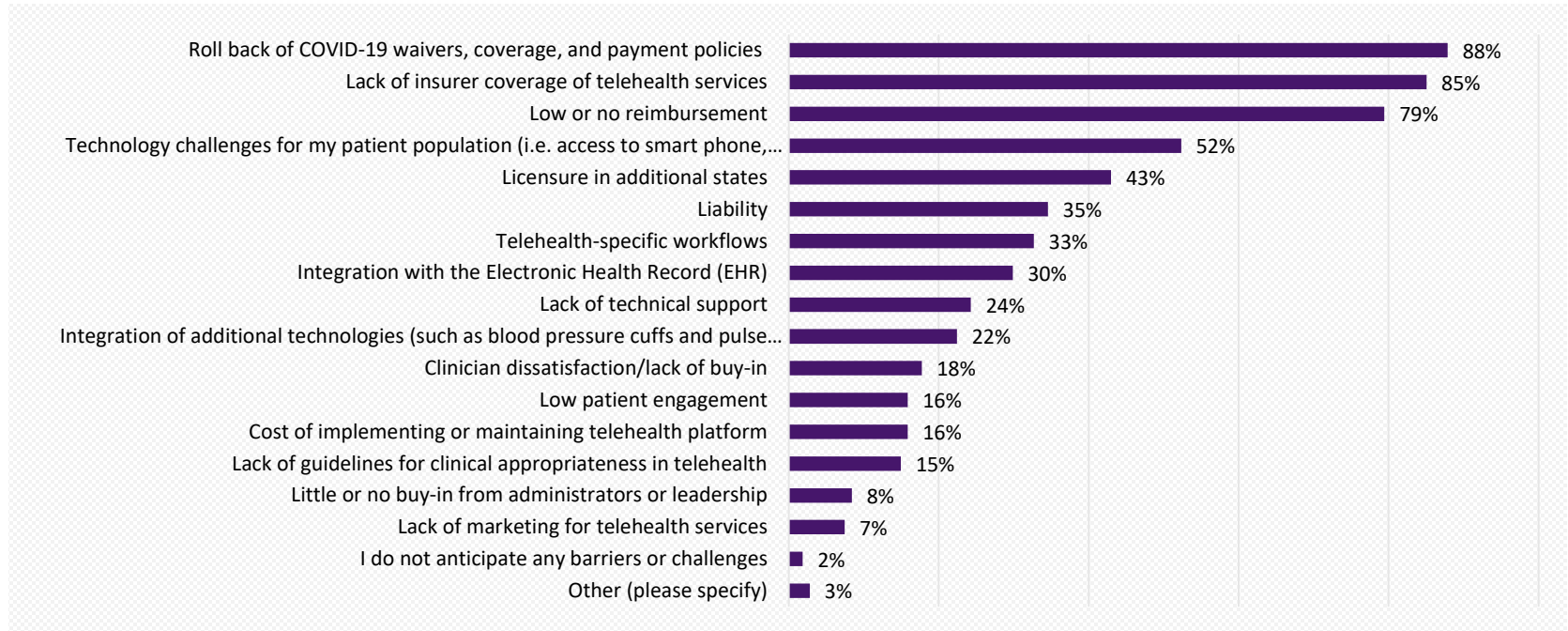
Q28. At what stage is your organization's telehealth program? (select all that apply) N=109

# Most are measuring the value of telehealth via patient satisfaction and access to care metrics



Q29. How do you currently measure the value of telehealth in your practice or organization? (select all that apply and if you can, share examples of relevant metrics) N=107

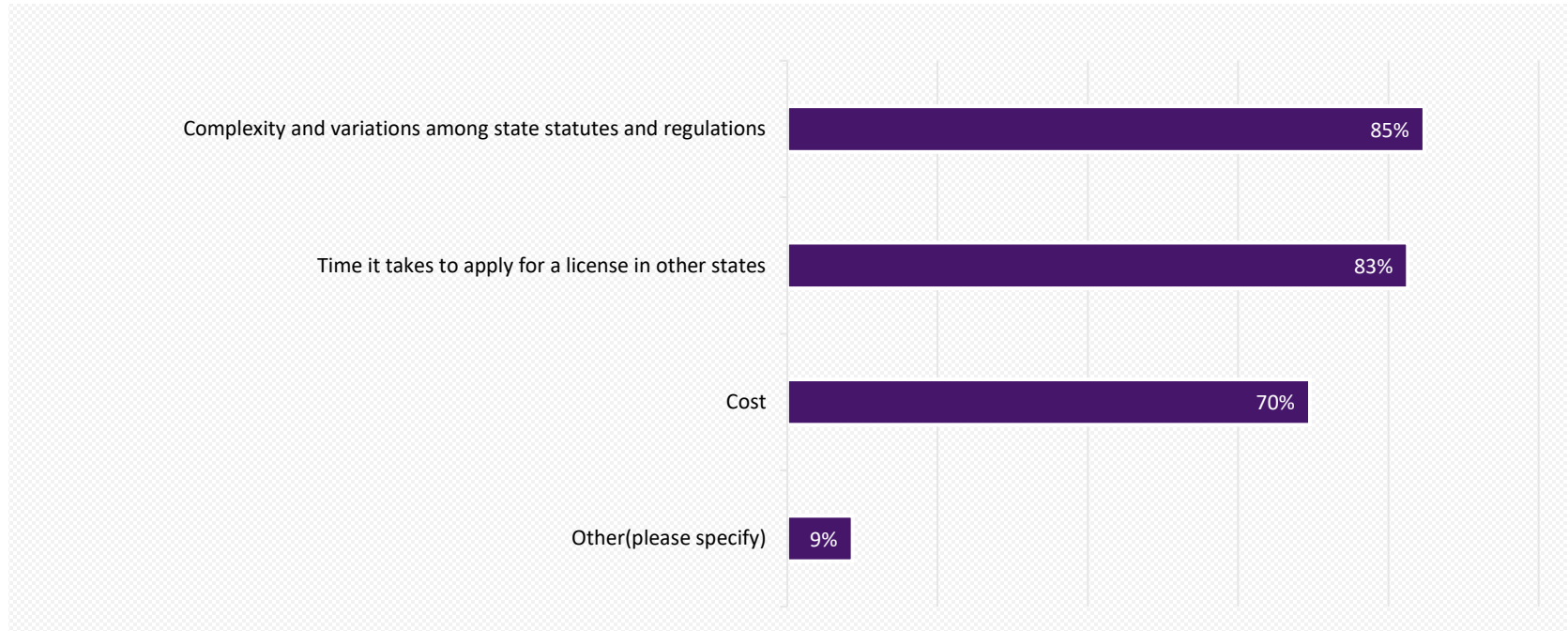
# Barriers to offering telehealth include coverage, payment, and reimbursement uncertainty



Q30. Which of the following, if any, do you anticipate being ongoing barriers or challenges to your organization offering telehealth? (select all that apply) N=107

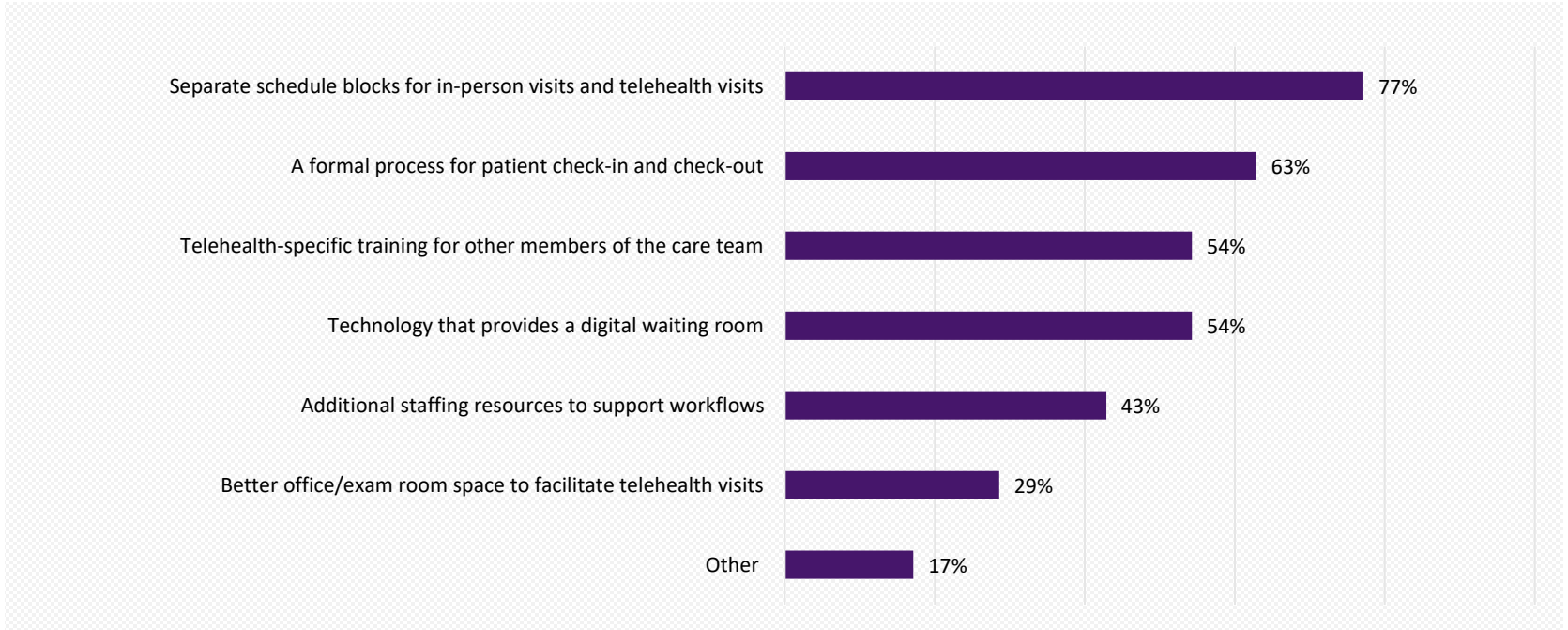


# Respondents that report *licensure* as a barrier to adopting telehealth specify the following aspects to be a challenge



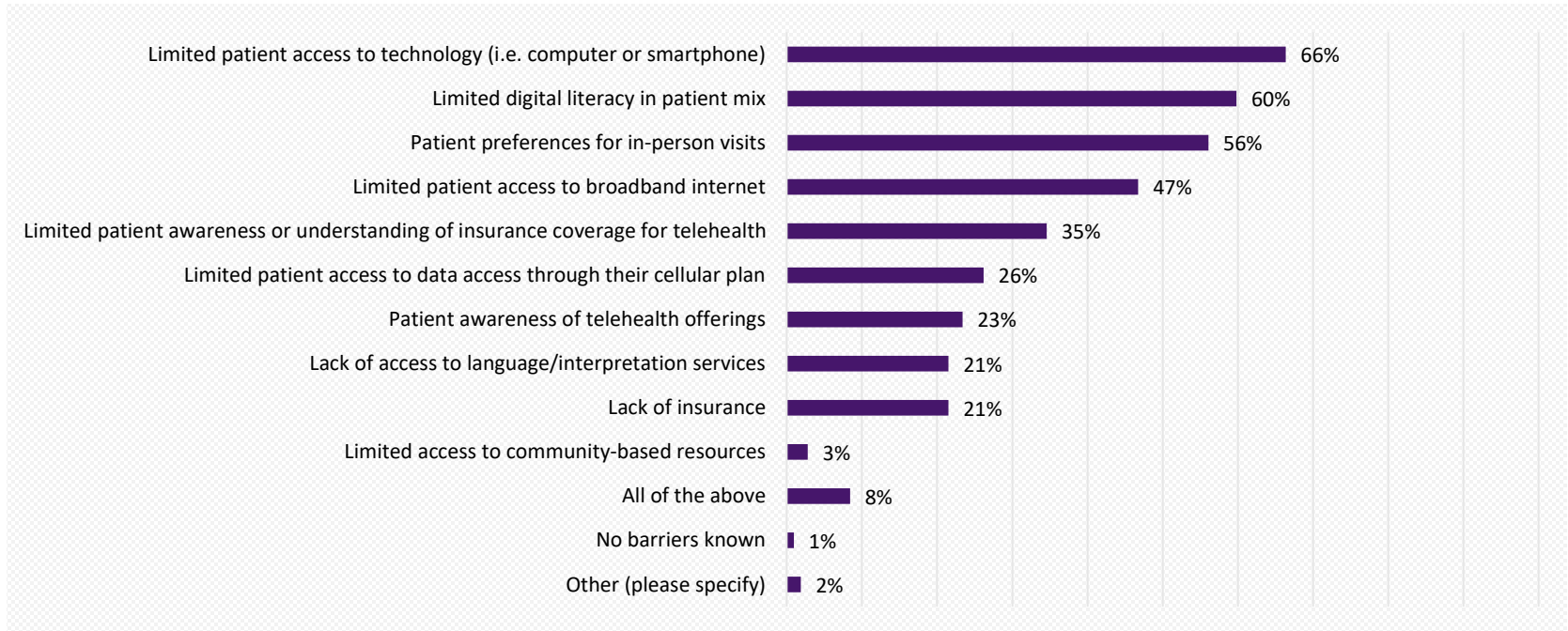
Q31. What barriers specific to licensure do you experience? (select all that apply) N=46

# Respondents identify the following as opportunities to improve telehealth workflows in the practice



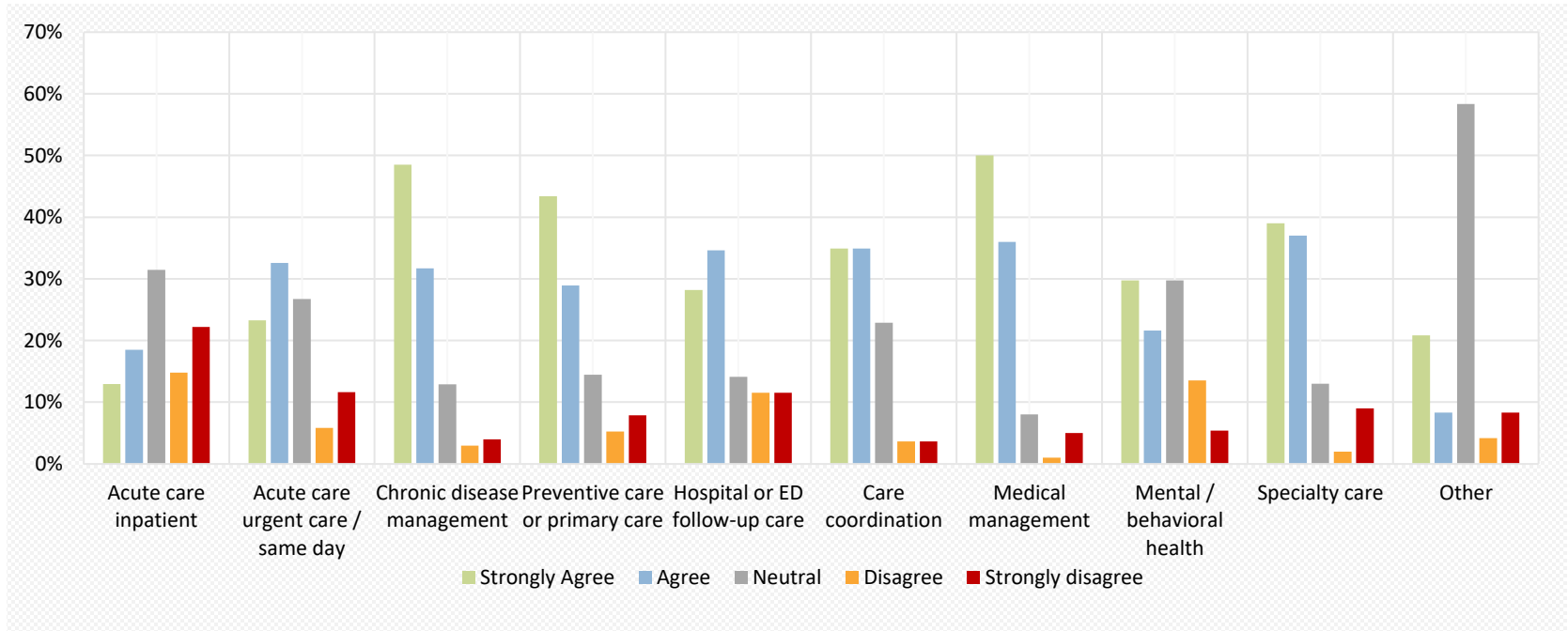
Q32. Which of the below would support improved telehealth-specific workflows? (select all that apply) N=35

# Physicians identify the digital divide as the biggest barrier to virtual care for patients



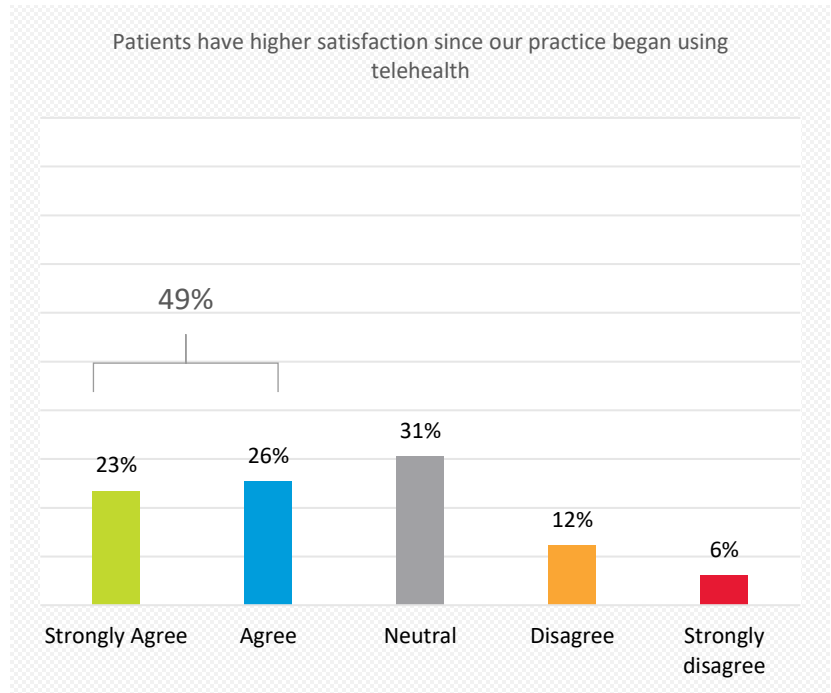
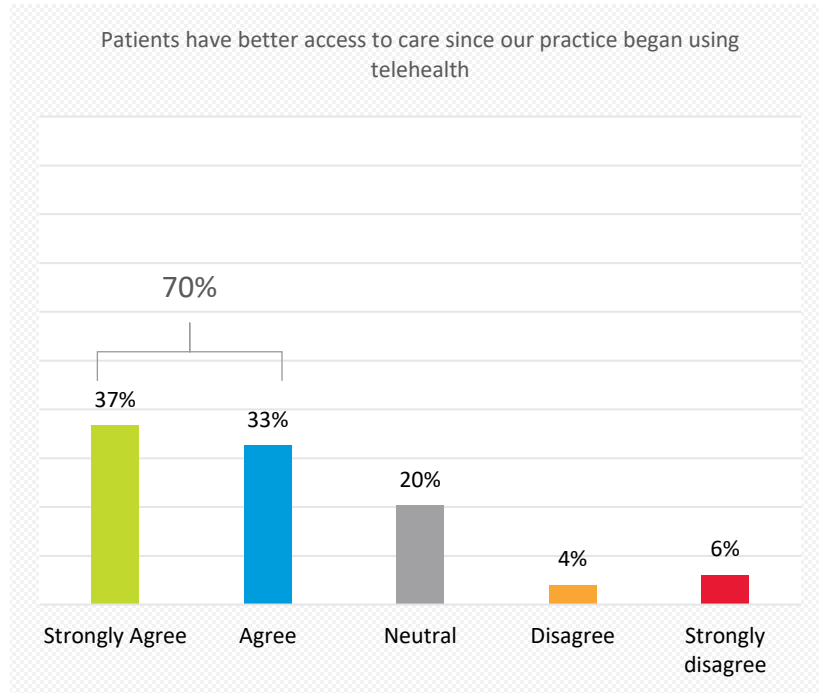
Q33. Which of the following, if any, do you perceive as barriers to your patients using telehealth? (select all that apply) N=107

# Allergy/Immunology respondents feel telehealth enables them to provide *high-quality care* for many types of services



Q34. To what extent do you agree or disagree with the following statement: Telehealth enables me to deliver high-quality care for... (N=102)

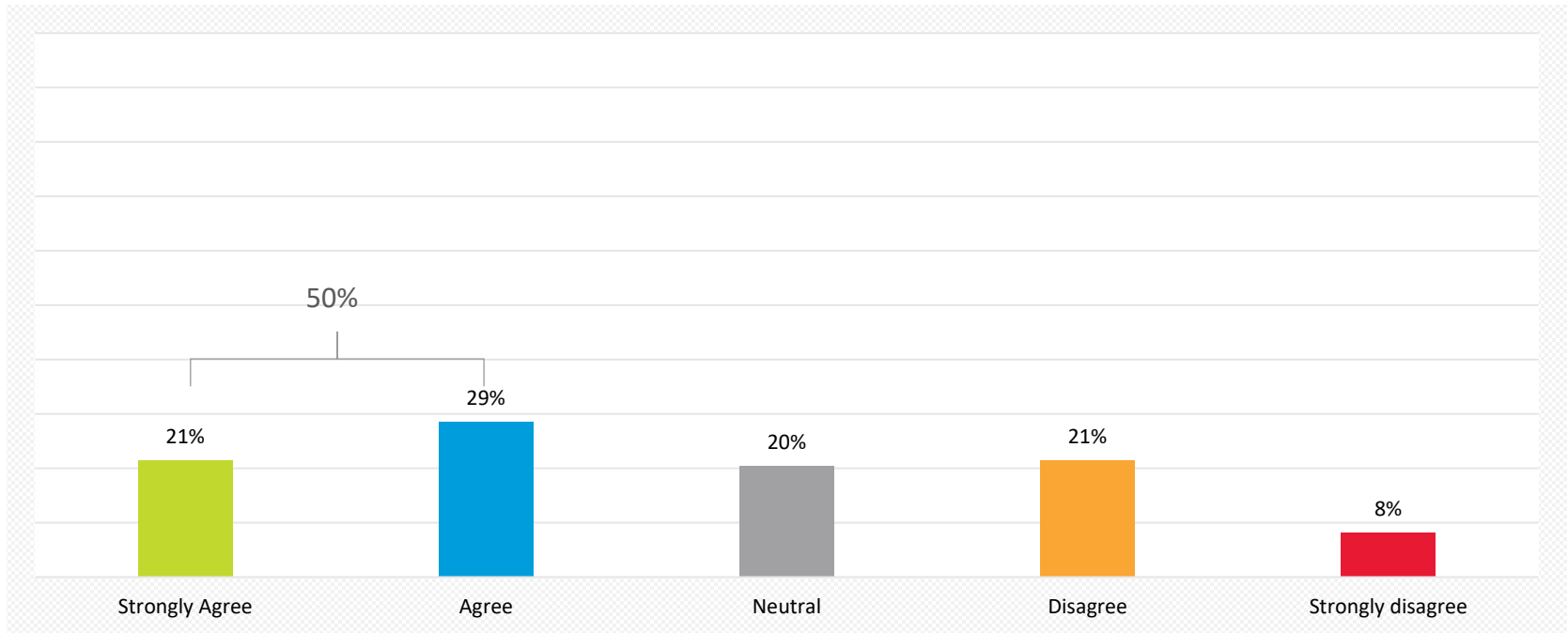
# Seven in ten agree that telehealth offers better access to care, and nearly half agree it contributes to *improved patient satisfaction*



Q35\_1. To what extent do you agree or disagree with the following statements? Patients have better access to care since our practice began using telehealth N=98

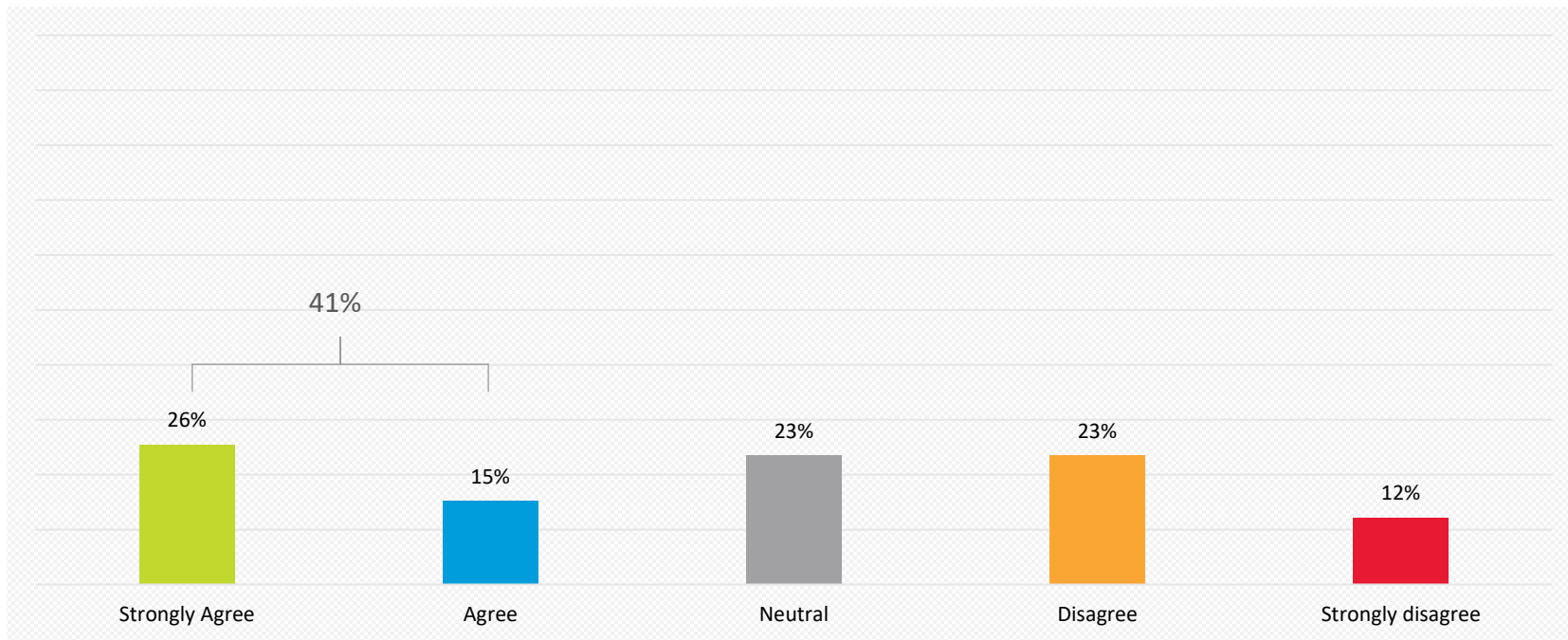
Q35\_2. To what extent do you agree or disagree with the following statements? Patients have higher satisfaction since our practice began using telehealth. N=98

# Half of respondents feel telehealth has allowed them to provide more comprehensive quality care



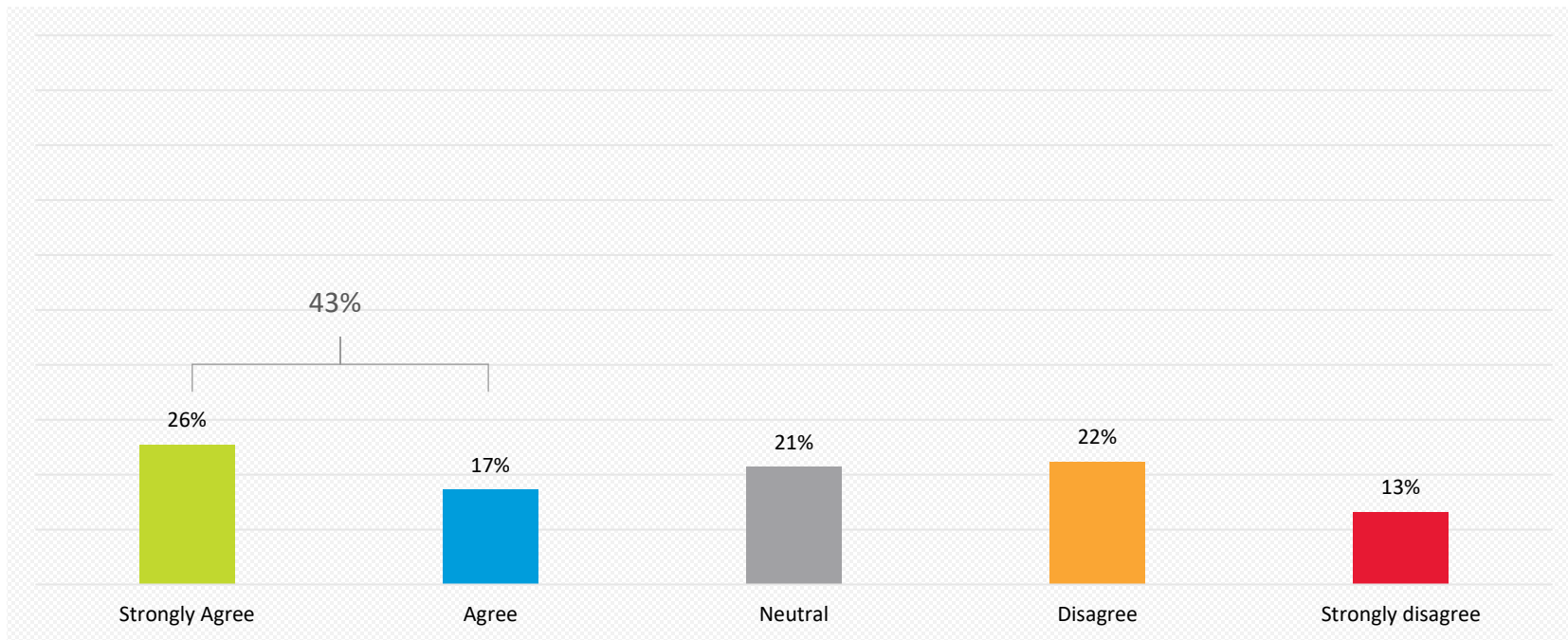
Q35\_3. To what extent do you agree or disagree with the following statements? Telehealth has allowed our practice to provide more comprehensive quality care for patients. N=98

# 41% of respondents agree or strongly agree telehealth has increased their professional satisfaction



Q35\_5.To what extent do you agree or disagree with the following statements? Telehealth has increased my professional satisfaction. N=98

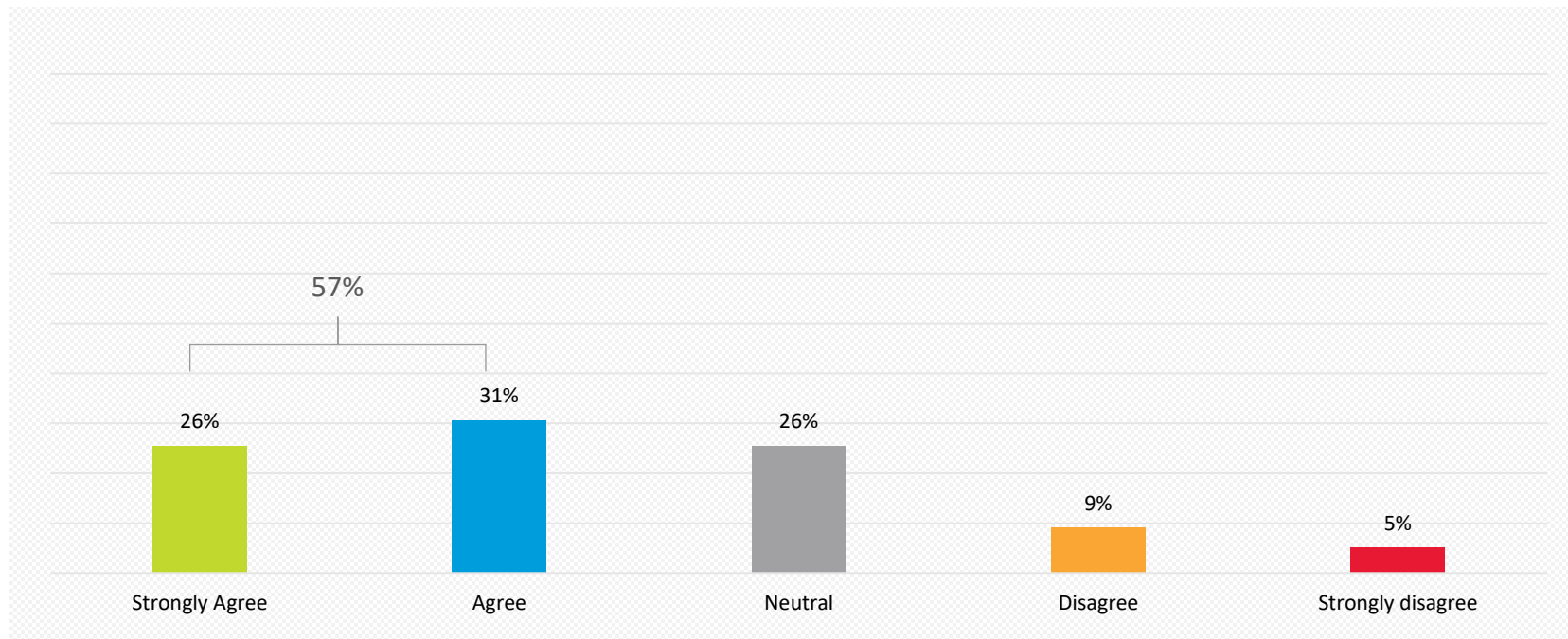
# Looking ahead, 43% of respondents are personally motivated to increase use of telehealth



Q35\_6. To what extent do you agree or disagree with the following statements? I am personally motivated to increase use of telehealth in my practice. N=98

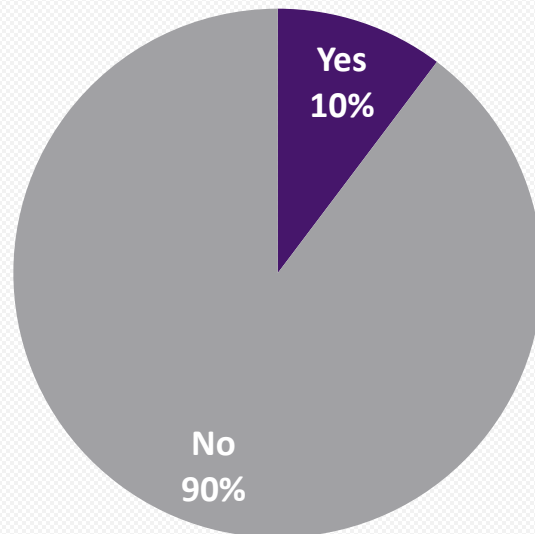


# 57% indicate their organizations leadership is motivated to continue the use of telehealth



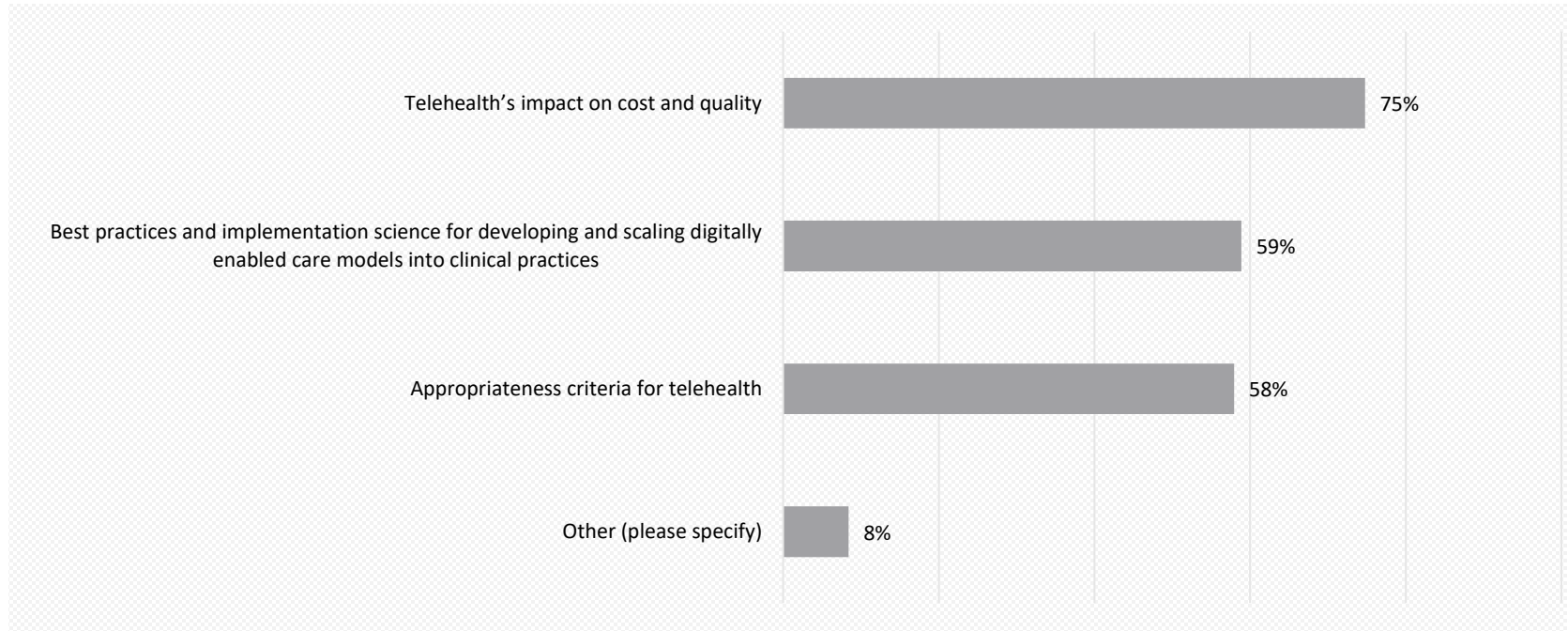
Q35\_9: To what extent do you agree or disagree with the following statements? - My organization's leadership is motivated to continue use of telehealth in my practice.  
N=98

# There is a low awareness of telehealth research or best practices, demonstrating a need for better dissemination of resources and information



Q36. Are you aware of any telehealth research or best practices that would be helpful to aggregate and disseminate across the industry to support continued, sustainable use of telehealth? N=107

# Respondents indicate there is a need for further research to support telehealth



Q37. What additional research is needed to support telehealth (select all that apply)? N=107

# Is there any additional insight or thoughts you would like to share regarding the impact of telehealth on you, your practice, or your organization?

## Fair and Equitable Payment

*“Maintaining reimbursement equal to in-person is paramount”*

*“Economics will determine if we keep up Telehealth as a big part of the allergy practice. Our patients often drive 150 or more miles to be seen and the convenience is great. My 5 minutes with the patient has at least 10 minutes of nurse/staff time before it, then another 5 to 10 minutes of coordination afterward, so these visits take MORE overhead.”*

*“Overall telehealth pays less than for a comparable office visit, so less motivation to continue or expand”*

*“Third parties lacked innovation to cover tele visits, which we wanted prior to the pandemic. We are hoping they will keep up support after being forced to allow this innovation.”*

*“Continue appropriate insurance coverage, equal to in-person visit.”*

## Other Feedback

*“I think as it is safer to see patients in person, we should eliminate telehealth. May be good for patients who live far from care, but I think patients are taking advantage of telehealth”*

*“Patients no longer take it seriously. They call in while driving or walking in the street”*

*“Telehealth is a far inferior form of care and is over utilized. Only a very small minority of my patient visits are appropriate for telehealth, but to remain competitive, we offer it more than should be allowed.”*


*“New patient telehealth is not a good idea. When a good solid physical exam is missing (as in hands on) routinely, quality of care suffers”*


Q39. Is there any additional insight or thoughts you would like to share regarding the impact of telehealth on you, your practice, or your organization?

# Telehealth Survey

This specialized report was prepared by the AMA for the American College of Allergy, Asthma, & Immunology (ACAAI), a Telehealth Immersion Program collaborator. Responses described in this report represent the 136 physician participants that identified their specialty as Allergy / Immunology.

For the full report, please visit us at: <https://www.ama-assn.org/practice-management/digital/telehealth-resource-center-research-findings>





## 2021 Telehealth Survey Report

SCAN ME

### Telehealth Use Trends

**CLINICAL OUTCOMES**

85% of physician respondents indicate they currently use telehealth. For those that report a decrease in use indicate now doing a mix of in-person and virtual care.

- 60% of clinicians agree or strongly agree telehealth enabled them to provide high quality care.
- Of those using telehealth, 93% (↑ 13%) are conducting live, interactive video visits with patients and 69% are doing audio-only visits.
- 56% of respondents are motivated (agree and strongly agree) to increase telehealth use in their practices.
- 8% (↓ 4%) of respondents said they were using remote patient monitoring technologies with patients in their homes; the commonly used tools include smartphones (camera), blood pressure cuffs, pulse oximeters, and body weight scales. 76% (↑ 7.6%) report data is usually shared manually (e.g. verbally over the phone or via email).

**PATIENT EXPERIENCE**

- More than 80% of respondents (↑ 12%) indicate patients have better access to care since using telehealth.
- 62% of respondents feel patients have higher satisfaction since offering telehealth.
- 63% (↑ 12.2%) of respondents report 75% or more of virtual visits are conducted with patients they have an existing relationship with.

**PROFESSIONAL SATISFACTION**

- A majority of respondents indicated that telehealth has improved the satisfaction of their work 54.2%.

**COST**

- 44% of respondents indicated that telehealth decreased the costs of care (strongly agree or agree)

Note: Trend comparisons refer to the COVID-19 Healthcare Coalition Physician Survey (conducted in 2020).  
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2,200+ survey respondents



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