

Telemedicine in America 2017: Parents Use of Virtual Visits

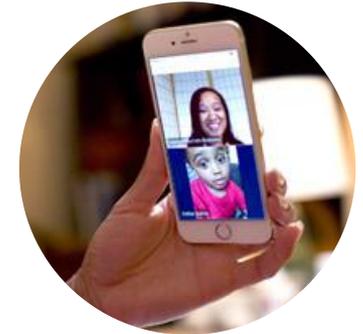
April 23, 2017

Table of Contents

- **Overview**
- **Survey Purpose**
- **Methodology**
- **Executive Summary**
- **Key Findings**
- **Detailed Findings**
- **Survey Questions**
- **Nemours Spokespeople**

Overview

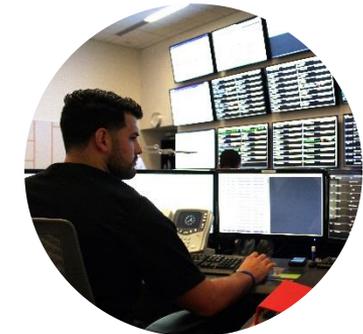
Pediatric telemedicine can take many forms: it can be a mother dialing up a pediatrician in the middle of the night, a rural hospital tapping the expertise of a pediatric subspecialist 300 miles away, or even a few extra sets of eyes monitoring the vital signs of the sickest children in a hospital. In every way, technology is enabling the limited number of primary and specialty care pediatricians in the United States to provide high-quality care to more children who need it.



Recent policy statements and research show the current distribution of primary care pediatricians is inadequate to meet the needs of children living in rural and other underserved areas, while more primary care pediatricians and pediatric specialists will be needed in the future because of the increasing number of children who have significant chronic health problems. This creates more burden on parents seeking high-quality pediatric care for their children. Online doctor visits are proving to be a comparable and worthwhile option for the many acute-care and well-child visits a child needs.



- In 2012, children younger than 18 in the U.S. made an estimate of 171 million visits to physician offices for acute-care visits.
- For children throughout the U.S., colds and flu account for 16 percent of all retail clinic visits, 14 percent of all primary care visits, and five percent of all emergency department visits each year.
- In the first five years of a child's life, parents are likely to spend an average of 30 hours away from work on well-child visits alone.



As parents look to raise children with accessible and evidence-based health care, telemedicine is proving to be a convenient and high-quality option for families.

Survey Purpose

- As a leading pediatric telemedicine provider, Nemours Children's Health System sought to understand current use, behaviors and trends related to parents and other caregivers' use of telemedicine for the care of children with whom they had any responsibility for scheduling healthcare visits.
- The survey included questions related to:
 - Awareness & previous use of online doctor visits
 - Quality of the child's visit *vis-à-vis* in-person visits
 - Reasons for using/not using online doctor visits, and the conditions for which an online visit would most likely be used
 - The importance of recognizing the name of the organization providing the service, being seen by different providers, such as a board-certified pediatrician, family physician or nurse practitioner, and comfort with remote sensing technology

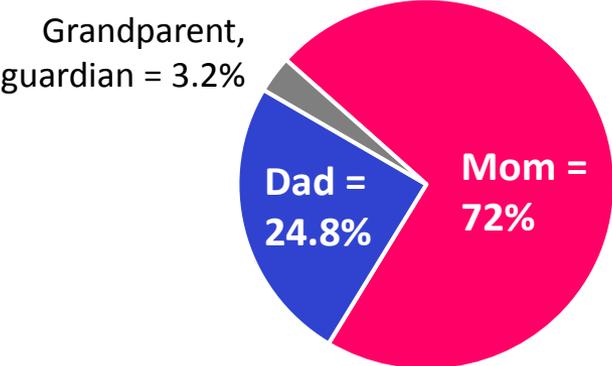
Methodology

- The online survey, *Telemedicine in America 2017: Parents Use of Virtual Visits*, was fielded by SHC Universal on February 15-20, 2017, on behalf of the Nemours' Consumer and Strategic Insights Group.
- The survey was conducted online among 500 U.S. caregivers ages 21+.
- Results were weighted by census region to align with actual proportions in the national population.
- Survey participants had to be the parent, grandparent, or legal guardian of at least one child 17 years old or younger, and either had to be solely responsible, or share responsibility, for scheduling a child's doctor visits.
- Because the sample was based on the SHC Universal panels of those who agree to take part in web surveys, no theoretical sampling error can be calculated.

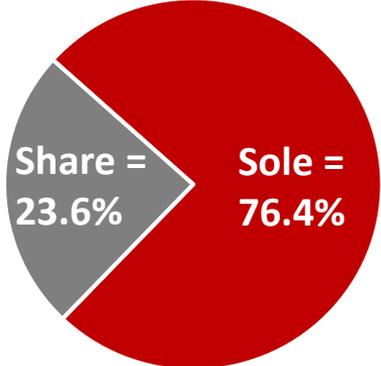
Methodology: Respondents

On average, our respondents were 40 years old, had 2 children in the household, and the average age of the children 17 years or younger was 10

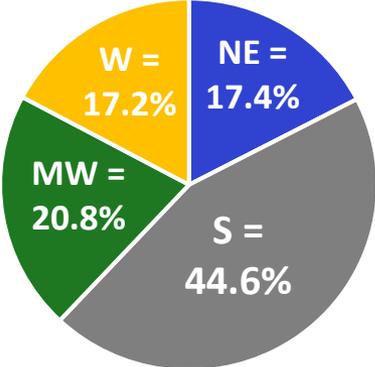
Household Role



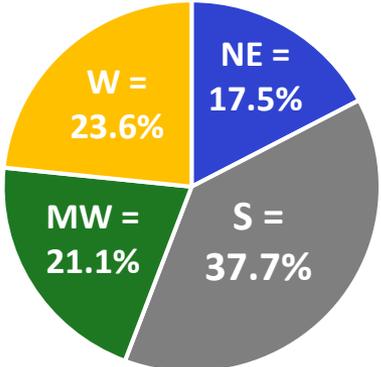
Responsibility for Scheduling Child's Doctor Visits



Sampled Census Region Representation



U.S. Census Region Representation



"Natural" field sampling closely mirrored actual census representation. Still, we weighted the data to census to align even more closely to the population

Executive Summary

Key Findings

A majority of caregivers (64 percent) have used or plan to use telemedicine within the next year for their child.

Caregivers who have used telemedicine overwhelmingly thought the experience was better than an in-person visit to the doctor's office (74.7 percent) and reported convenience, after-hour accessibility, and immediacy as the top three reasons they sought out an online doctor visit for their child.

For those who have already had their child seen remotely, a variety of different convenience reasons explain why parents took that approach.

Key Findings

The findings of the poll show a growing awareness and increasing acceptance of telemedicine services, but also demonstrate the limited use parents consider for the tool.

Parents seem willing to use telehealth for immediate health concerns, but are more reluctant when it comes to considering telemedicine care for chronic conditions.

Suspected allergic reactions, ear infections and chronic conditions are more likely to lead to in-office visits than virtual visits.

Parents who are comfortable with technology are more likely to try an online doctor visit for their child.

Detailed Findings

Detailed Findings: Use of Telemedicine

A majority of caregivers (64 percent) have used or plan to use telemedicine within the next year for their child.

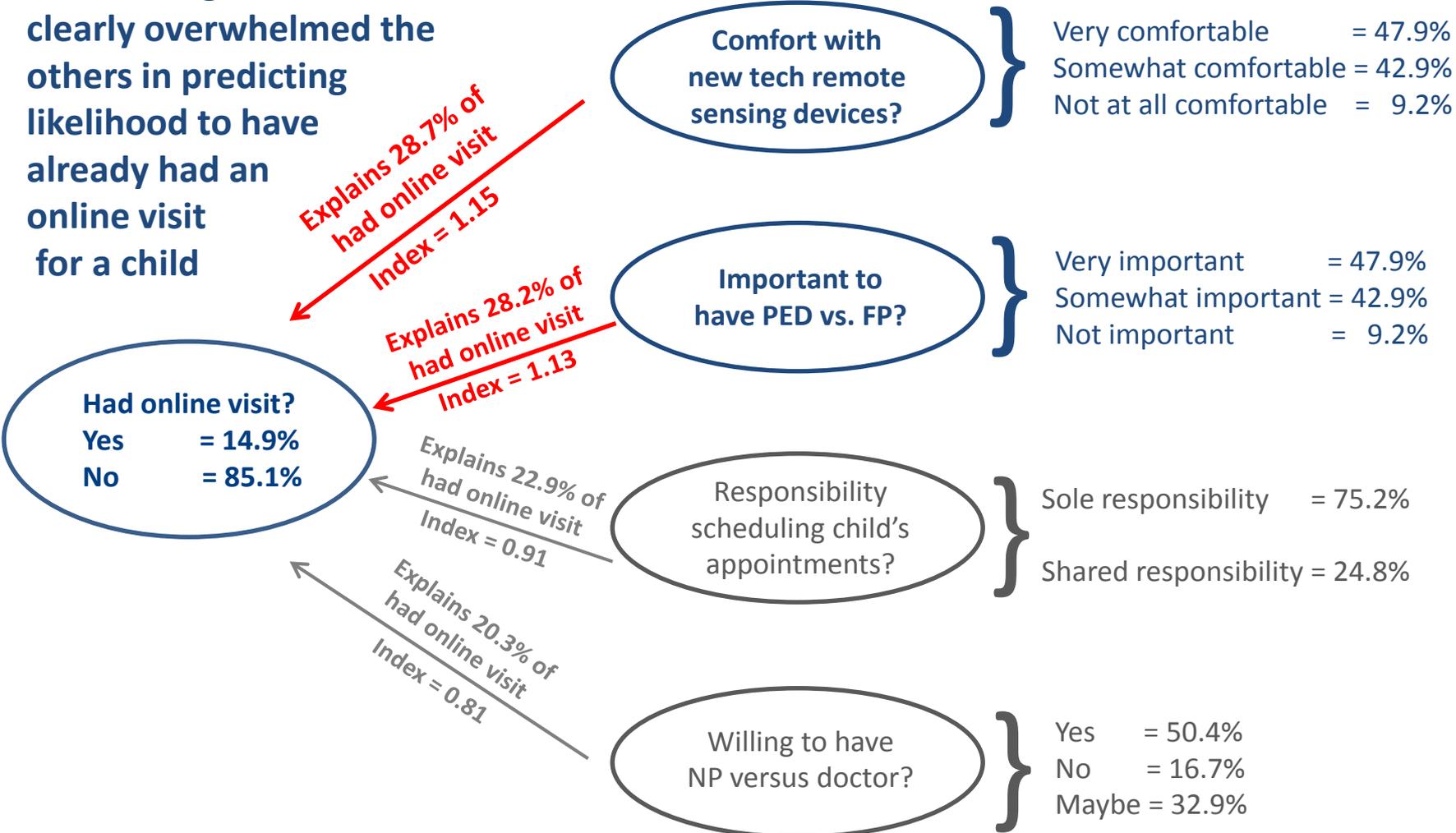
- Only 14.9 percent of caregivers have tried these services for their children, but 61.0 percent of those who have not yet used telemedicine report that they plan to use telemedicine in the coming year for their children's doctor appointments.
- A small minority of caregivers surveyed who have not yet used telemedicine, 7.7 percent, do not plan to use telemedicine, while 31.3 percent remain unsure.

Caregivers who have used telemedicine overwhelmingly thought the experience was better than an in-person visit to the doctor's office (74.7 percent) and reported convenience, after-hour accessibility, and immediacy as the top three reasons they sought out an online doctor visit for their child.

- Among those parents who have tried an online doctor visit for their child, nearly all of them (97.5 percent) said it was better or the same as an in-person visit.
- A majority of those who have already had an online doctor visit for their child also looked to telemedicine for more immediate care than waiting for an in-office visit (53.4 percent) or for an after-hours medical opinion (52.3 percent).

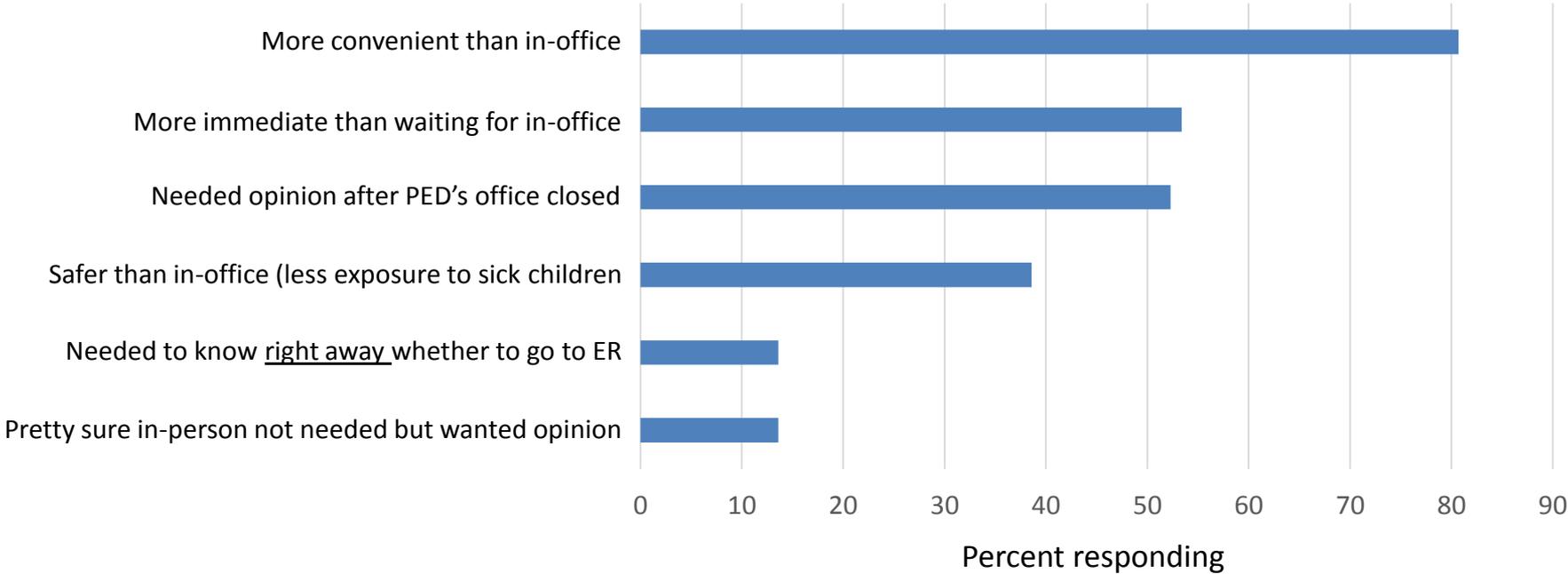
Detailed Findings: Four Factors Distinguished Those Who Had an Online Visit

And no single factor clearly overwhelmed the others in predicting likelihood to have already had an online visit for a child



Detailed Findings: Reasons for an Online Visit

For those who have already had their child seen remotely, a variety of different convenience reasons explain why parents took that approach



Detailed Findings: Growing Use and Awareness

The findings of the poll show a growing awareness and increasing acceptance of telemedicine services, but also demonstrate the limited use parents consider for the tool.

- Compared to a similar study conducted by Nemours in 2014, parents' use of online doctor's visits for their children, while still relatively low, has grown by 125 percent, and their awareness of telemedicine services has increased 88 percent.
- Dads surveyed were more likely to have already used telemedicine services for themselves and/or their children (33.9 percent), compared to moms surveyed (21.7 percent).
- Parents' motivation for using telemedicine for their children is focused around convenience and immediacy.
- While most parents envision using telemedicine for acute-care needs rather than chronic conditions, the healthcare system is increasingly investing in the power of telemedicine to connect patients and families with specialty care for managing chronic conditions.

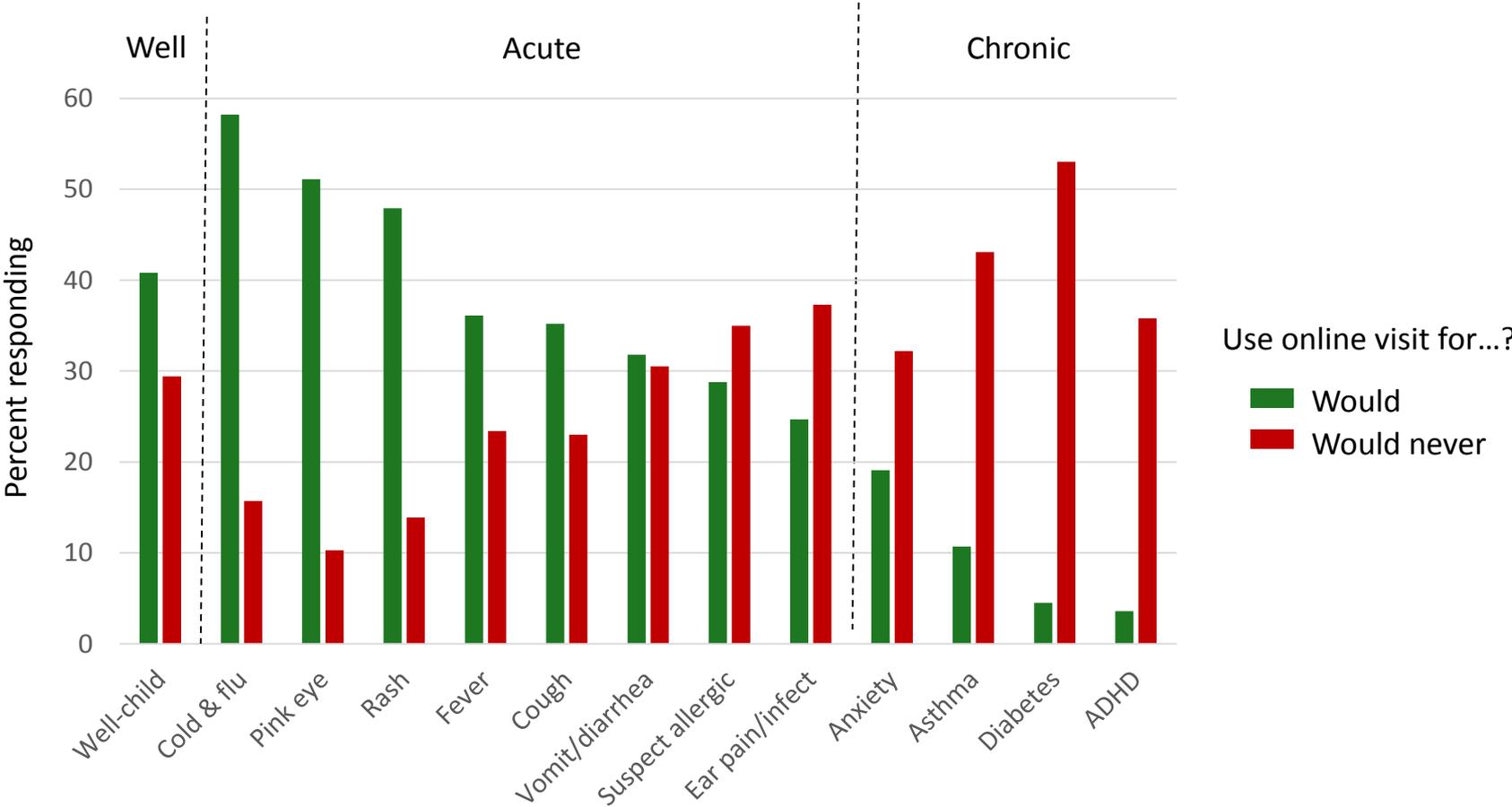
Detailed Findings: Condition-Specific Use

Parents seem willing to use telehealth for immediate health concerns, but are more reluctant when it comes to considering telemedicine care for chronic conditions.

- Parents are most willing to use telehealth services for common childhood ailments, including cold and flu (58 percent), pink eye (51 percent), rash (48 percent), and well-child visits (41 percent)
- Parents are most likely to report *never* considering using telehealth services for diabetes (53 percent), asthma (43 percent), ear pain (37 percent) and ADHD (36 percent).

Detailed Findings: Condition-Specific Use

Suspected allergic reactions, ear infections and chronic conditions are more likely to lead to in-office visits than virtual visits.

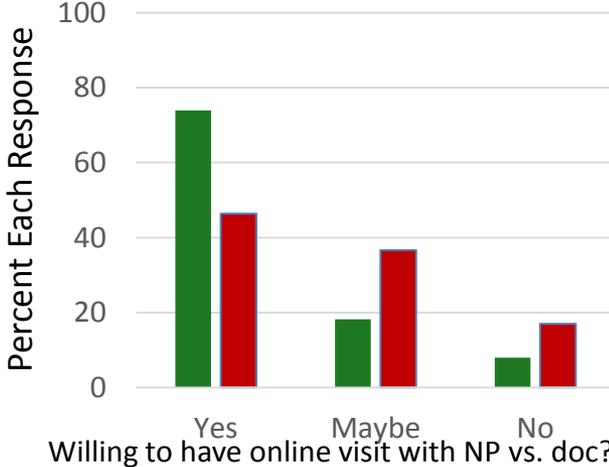
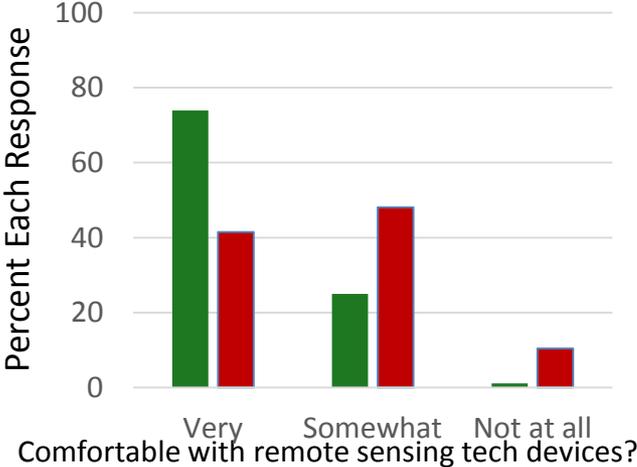


Detailed Findings: Technology Comfort

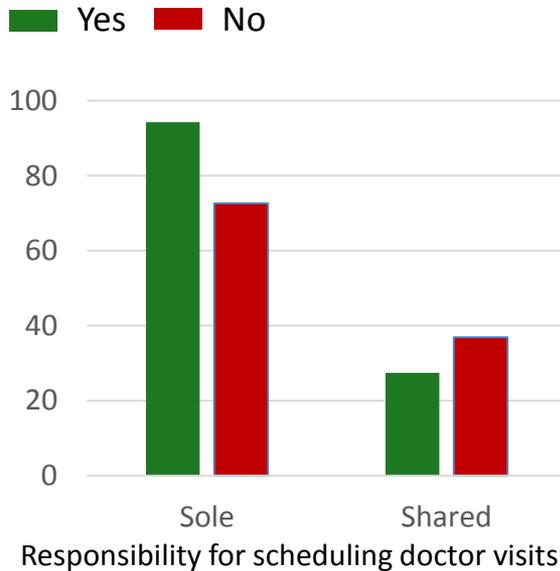
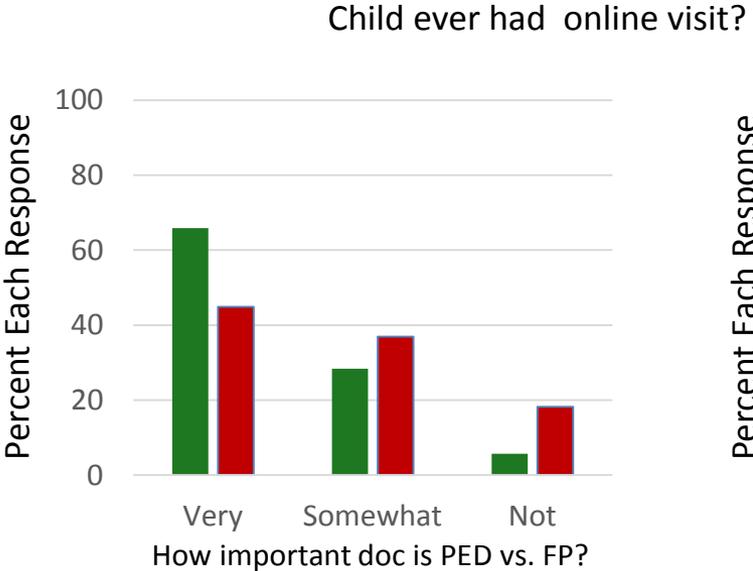
Parents who are comfortable with technology are more likely to try an online doctor visit for their child.

- Among those who were very comfortable with trying new remote sensing devices, such as those attached to a smartphone for sending vitals or other clinical measures to a doctor (48 percent), 29 percent of them already had had an online doctor visit for their child.

Detailed Findings: Technology Comfort



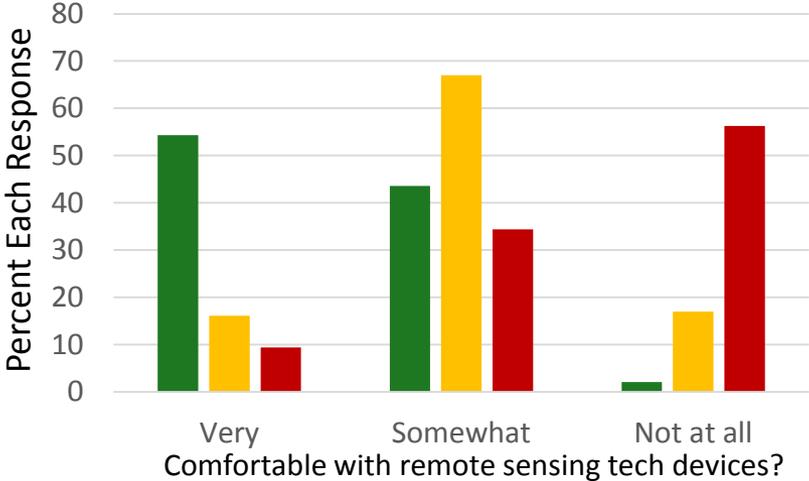
Respondents who have already had an online visit for their child are also those who say they would be very comfortable with new remote sensing technology.



As well, they would want the doctor to be a pediatrician rather than a family physician, but would be willing to have a nurse practitioner.

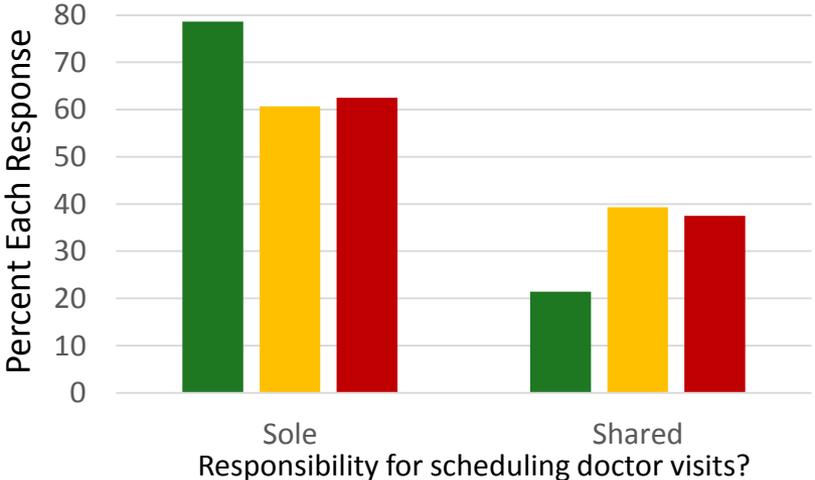
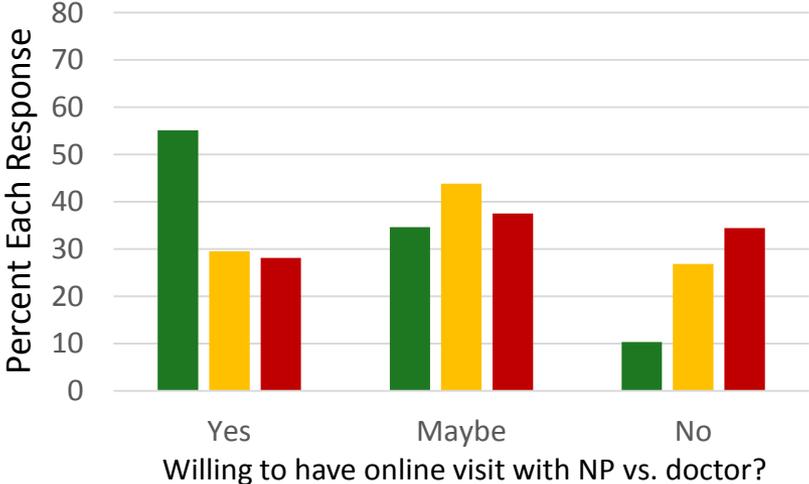
Finally, those who have already had an online visit are those likely to be the adult solely responsible for doctor visits.

Detailed Findings: Technology Comfort



Some level of comfort with new remote sensing technology goes along strongly with likelihood to seek an online visit, whereas the majority of those not comfortable will not likely seek online visits.

And, those likely to see an online visit are those likely to be the adult solely responsible for doctor visits.



Survey Questions and Detailed Findings

Survey Questions and Detailed Findings

Q1: Are you a:	
Mom	73.0%
Dad	24.3%
Grandmother	1.5%
Grandfather	0.3%
Guardian	0.8%
Other	0.1%

Survey Questions and Detailed Findings

Q2: Before taking this survey today, had you ever heard of online doctor visits (sometimes also called telemedicine, telehealth, or virtual doctor visits), where your child would be seen by a doctor or nurse using a computer, tablet, or mobile phone?

Yes	67.9%
No	28.0%
Not sure	4.1%

Q3: Have you ever used online doctor visits for yourself or your child?

Yes, for my child (Ask Q4a)	9.2%
Yes, for myself (Skip to Q5)	6.3%
Yes, for both (Ask Q4a)	5.7%
No (Ask Q4c)	77.8%

Survey Questions and Detailed Findings

Q4a: Thinking of the online doctor visit for your child, how would you compare the experience of such an online visit to a visit in the doctor’s office? If you have had more than one such visit, please give an overall impression across all online doctor visits.

Better	74.7%
Worse	2.5%
Same	22.8%

Q4b: Which of the following describe why you used an online doctor visit for your child? (select all that apply) [ALLOW MULTIPLE RESPONSES, THEN SKIP TO 4e]

I thought it would be more convenient than an in-office visit	80.7%
I thought it would be safer than an in-office visit (would not expose my child to other sick children)	38.6%
I needed to get a doctor’s/nurse’s opinion after my pediatrician’s office had closed	52.3%
It was more immediate than waiting for an in-office visit	53.4%
I had to understand <u>right away</u> whether I needed to get my child to the emergency room	13.6%
I was pretty sure my child didn’t need to be seen in-person but still needed a doctor’s opinion	13.6%
Other	1.1%

Survey Questions and Detailed Findings

Q4c: Which of the following describe why you have not used an online doctor visit for your child? (select all that apply) [ALLOW MULTIPLE RESPONSES]

I had never heard of an online doctor visit before this survey	35.7%
I had heard of online doctor visits but they were not available or offered to me in this area	21.7%
I had heard of online doctor visits but wasn't sure I could trust a diagnosis for my child that's not face-to-face	25.9%
I was concerned about being double-charged if during the online visit the doctor told me I need to take my child to see a doctor in-person	9%
I thought the cost would be too high	17.5%
I tried to use an online doctor visit but they didn't take my insurance	1.3%
I would have used an online doctor visit if I could have seen a doctor familiar with my child	14%
I would have concerns over not knowing the doctor's background and credentials	18.5%
Other	4%

Survey Questions and Detailed Findings

Q4d: If it was available to you and you could use your health insurance with the service, would you seek a online doctor visit for your child in the next year?

Yes	61%
No	7.7%
Not sure	31.3%

Survey Questions and Detailed Findings

**Q4e: For which of the following conditions would you consider using an online doctor visit to treat your child? (select all that apply)
[ALLOW MULTIPLE RESPONSES]**

Well-child visit	40.8%
Rash	47.9%
Pink eye	51.1%
Suspected allergic reaction	28.8%
Cold and flu	58.2%
Fever	36.1%
Persistent cough	35.2%
Ear pain or infection	24.7%
Vomiting or diarrhea	31.8%
Asthma	10.7%
Diabetes	4.5%
Anxiety	19.1%
ADHD	3.6%
Other	3.6%

**Q4f: And, for which of the following conditions would you never consider using an online doctor visit to treat your child? (select all that apply)
[ALLOW MULTIPLE RESPONSES]**

Well-child visit	29.4%
Rash	13.9%
Pink eye	10.3%
Suspected allergic reaction	35.0%
Cold and flu	15.7%
Fever	23.4%
Persistent cough	23.0%
Ear pain or infection	37.3%
Vomiting or diarrhea	30.5%
Asthma	43.1%
Diabetes	53.0%
Anxiety	32.2%
ADHD	35.8%
Other	7.7%

Survey Questions and Detailed Findings

Q5: If you were considering an online doctor visit for your child, how important would it be for you to recognize the name of the healthcare organization providing the service?

Very important	72.7%
Somewhat important	24.3%
Not important	3%

Q6: If you were considering an online doctor visit for your child, how important would it be that the doctor is a pediatrician instead of a family doctor?

Very important	48.3%
Somewhat important	34.7%
Not important	17.0%

Survey Questions and Detailed Findings

Q7: If you were considering an online doctor visit for your child, would you be willing to have the visit be with a nurse practitioner instead of a doctor?

Yes	50.4%
No	16.7%
Maybe	32.9%

Q8: New technology allows parents to use devices inside the home to look inside a child's ear or throat, or visually scan a child's skin and instantly share the results during an online doctor visit. How comfortable would you feel using these tools?

Very comfortable	47.9%
Somewhat comfortable	42.9%
Not comfortable at all	9.2%

Survey Questions and Detailed Findings

Q9: Would you expect to pay a fee for your child's virtual online doctor visit?	
Yes	64.1%
No	9.6%
Maybe	26.3%

More Information

For More Information: Nemours' Expert Spokespeople



Gina Altieri, CPA

Senior Vice President and Chief of Strategy Integration

Gina Altieri serves as Enterprise Senior Vice President and Chief of Strategy Integration, responsible for Children's Health System, responsible for Nemours strategic planning process, information services and analytics, consumer digital health and marketing and communication.



Shayan Vyas, MD

Director of Telemedicine

Dr. Vyas is Medical Director for Nemours Telehealth and Nemours CareConnect. Nemours CareConnect internally serves partnering emergency dept., NICUs, partner hospitals and cruise ships. Dr. Vyas is a pioneer in pediatric telemedicine, leading Nemours to develop the first direct-to-consumer (DTC) multi-state, 24/7 pediatric telemedicine program.



Carey Officer

Administrator, Telehealth

Carey Officer provides critical leadership and support for researching, evaluating, and incubating innovative clinical service delivery strategies including Telehealth. Officer previously served as Nemours' Senior Strategic Financial Planning Consultant.

For More Information: Nemours' Expert Spokespeople

For more information on the survey or to speak with a Nemours expert, please contact Josh Wilson, MBA, director of public relations, at Josh.Wilson@Nemours.org or (407) 650-7497.