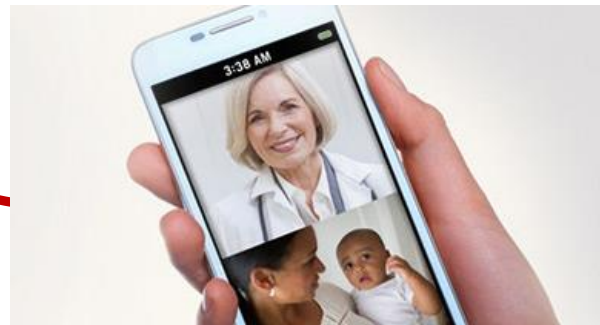




# Marshalling Evidence to Drive Equity in Access

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**Nemours. Social Determinants of Health**  
 Current as of: 12/08/2020

Would you like to complete the form?  
 Yes  No

**Domains**

- Food insecurity
- Financial literacy
- Transportation
- Housing
- Utilities
- Social support
- Health literacy
- Factors to address
- Neighborhood
- Legal concerns

- In the past 12 months, were there times the food you bought didn't last and you didn't have the money to buy more?  
 Yes  No
- In the past 12 months, have you ever had trouble paying for a doctor, dentist, or medicine for you or your child?  
 Yes  No
- In the past 12 months, did your child ever go without medicine or miss a medical appointment because you didn't have a way to get to the pharmacy or doctor?  
 Yes  No
- In the past 12 months, has your utility company ever shut off your service because you were unable to pay your bill (electric, gas, water, heat, or phone)?  
 Yes  No
- Is reliable internet a concern?  
 Yes  No
- In the past 12 months, have you or your child ever had to stay in a shelter, stay with others, in a hotel, live outside on the street, on a beach, in a car, or in a park, even for 1 night?  
 Yes  No
- Currently, do you have any problems in the place where you live like mold, traps, ants or mice, lead paint or pipes, lack of heat or air conditioning, not working or lack of smoke detectors, even or stove, water leaks or other major issues?  
 Yes  No
- Are you concerned about testing your housing?  
 Yes  No
- Do you have any concerns about your fostering/kinship or custody arrangement or your family's immigration status?  
 Yes  No
- In the past 12 months, have you or any other family member been hit, threatened, abused, or bullied?  
 Yes  No
- Do you have any concerns about your neighborhood with safety, gun violence, cleanliness or crime?  
 Yes  No
- Do you sometimes have a hard time understanding what your doctor or nurse is telling about your child's health or medications?  
 Yes  No
- Do you sometimes have a hard time understanding doctor instructions and medical paperwork?  
 Yes  No
- In the past 12 months, has there been a time when you or your child needed help and you had no one to call on (such as with transportation or childcare)?  
 Yes  No *if "yes": Could you explain?*

Are you interested in receiving information to address these needs?  
 Yes  No

Based on updates, questions and question order are subject to change

# Nemours Children's Health System



Wilmington, Delaware



Orlando, Florida

- Nonprofit children's health system, providing care, research, and education, through the efforts of some 8,400 Associates
- Provides care via primary, specialty, urgent care, telehealth and two children's hospitals
- Recipient of NIH, CMMI, CDC, WIC, and PCORI funding
- Develop and operate innovative population health services and products through our Center for Health Delivery Innovation (CHDI)
- Consumer Insights is part of CHDI

***Nemours is a beneficiary of the enduring legacy of Alfred I. duPont***

# Alfred I. duPont: True to Every Trust



- Born 1864, orphaned at age 13
- Before he died, Alfred's father urged him to “get an education, come back home, take off your coat, and ask your Uncle Henry for a job”
- When Alfred took over as the fifth-generation owner of the family's black powder business, he did so having learned from the ground up working alongside other Brandywine powdermen
- The ethics developed from having worked alongside those less advantaged than he helped him see life from that standpoint
- Alfred's will set up The Nemours Foundation, and gave us these words:

***“It has been my firm conviction throughout life that it is the duty of everyone in the world to do what is within his power to alleviate human suffering.”***

# Concepts of IDEA: In the Very DNA of Nemours

- That statement from A.I. duPont's will is inclusive; there are no codicils or conditions defining or profiling whose suffering should be alleviated: the focus has no boundaries
- This boundlessness invites diversity, equity, and access, captured in this cartoon from the Philadelphia Sunday Bulletin in 1949:
- The 1937 prospectus of The Nemours Foundation spoke of how A.I. duPont "...**proposed by his own efforts to do that which the social welfare movements on a national scale seemed to be unable to attain up to that time.**"
- Speaking in the early 1930s, duPont reminded parents of that generation: "**The wealth you are creating, through your endeavors, passes to your children. The opportunity presents itself, not to extend charity, but justice.**"
- A.I. duPont's vision for Nemours is not just inspirational, but aspirational, and we feel the obligation to be true to that trust



# Nemours, Now & Future: Vision, Strategic Pillars, Imperatives

**From the highest management levels downward, our vision:**

- In order to achieve the healthiest generations of children, we must re-write the definition of children's health
- There are estimates that 80% of a child's ability to achieve health occurs outside a doctor's office
- This will require working with public, private, governmental and community partners to address the social determinants of health: factors aside from the purely medical that affect health

**Built on these strategic pillars (among others):**

- National Reputation and Influence
- Health, Value, Equity:

**With strategic imperatives as pillar foundations, for example:**

- Voice of the Child and Family
- In fact, though the Nemours strategic plan has other foundational imperatives, listening to this voice is considered the cornerstone of all we do, inclusive of differences

EQUALITY  $\neq$  EQUITY



# The Study: Social Determinants and Telehealth in the COVID-19 Era

- In keeping with the strategic pillars and foundational imperative just introduced, Nemours conducted, in collaboration with Amwell (formerly, American Well), a survey to enhance the national conversation about the state of pediatric telehealth use
- We wanted to understand the extent to which the COVID-19 pandemic had affected/is affecting parents' use/intended use of telehealth for their children, as well as for themselves
- Further, we wanted to investigate the role social determinants of health play in impacting who does and does not use telehealth: e.g, food & financial/employment security, transportation access, personal safety
- Our survey collected data from 2,056 respondents, parents/legal guardians of at least one child in the household under 18 years old
- Sampling was stratified for representation within the four census regions on these variables:
  - Age, sex, household income, race/ethnicity; *post hoc* weighting projected to census data where needed
- Data collection took place via online survey (personal computers, tablets, mobile phones) with a panel of compensated respondents (rewards points)
- Fielding was conducted from 19-31 March, 2021, timed roughly to correspond to one year after the start of the global pandemic

# Specific Social Determinants Examined in the Study

- The questionnaire contained three banks of social determinant items, relating to: (a) health but also more general life circumstances, (b) factors limiting the ability to live a healthy life, and (c) factors limiting future telehealth use
- The bank of more general life circumstance social determinants was used for clustering; the other social determinant questions, as well as all other survey items, served as cluster descriptors
  - I was worried I would run out of food before I got money to buy more.
  - I wasn't able to access a grocery store or market with healthy food options.
  - I had trouble paying for a doctor, dentist or medicine for myself or my child.
  - I had trouble getting to a doctor or dentist's appointment for myself or my child due to lack of transportation.
  - I have missed or skipped a scheduled doctor or dentist appointment because I was unable to get to the appointment
  - I have missed or skipped a scheduled doctor or dentist appointment because I was unable to pay for it
  - I couldn't pay one or more of my bills.
  - I have had trouble finding work or maintaining a steady income.
  - I have had trouble finding affordable childcare for my child(ren) so that I could work.
  - I was worried for my/my family's personal safety.
  - None of these

# Cluster Analysis Revealed Stark Disparity in Social Determinant Experience

- Through the multiple clustering techniques employed, two and only two segments emerged:
  - Adverse SDOH segment; 100% of this cluster had experienced at least one socially-determining issue in the past six months
  - No SDOH Experiences segment; 100% of this cluster had experienced NO socially-determining issues in the past six months,
- Further, while 41.4% of the Adverse SDOH segment had 1 issue, 26.7% had 2 issues, most often paired:
  - Worry about running out of food before getting the money to pay for it + not being able to pay bills
  - Not being able to pay bills + having trouble finding work or maintaining a steady income
  - Having trouble paying a medical bill + skipping an appointment because of inability to pay
  - Missing or skipping a medical appointment + trouble getting to an appointment b/c lacking transportation
- Still further, 17.9% of the Adverse SDOH segment had 3 issues, most often grouped:
  - Not being able to pay bills + trouble paying for medical care + missing or skipping an appointment because of inability to pay
  - No access to a grocery store or market with healthy food options + trouble finding affordable childcare to be able to work + trouble getting to medical appointments because of lack of transportation



# Socially-Determined Barriers to Living a Healthy Life

- Non-medical factors limiting healthy living underscore stark disparities: **89.0%** of the No SDOH Experiences group claimed no limitation to living a healthy life, contrasted with only **29.7%** of the Adverse SDOH group

Limitation to Family Living a Healthy Life	Adverse SDOH	No SDOH Experiences
Unlivable income (not enough to cover basic needs)	21.8%	2.5%
Lack of transportation	19.5%	1.7%
Lack of access to healthy food	18.9%	3.4%
Exposure to violence	17.4%	2.2%
Not enough employment opportunities	16.1%	2.3%
Unsafe communities	15.7%	2.7%
Low quality childcare	14.9%	2.2%
Poor schools	13.4%	2.2%
Unsafe housing	11.6%	0.8%

# Generally, the Adverse SDOH Segment Shows a Greater Desire for Telehealth

- For the total sample, one year after the start of the COVID-19 pandemic, 71.1% of respondents said they had ever used telehealth (themselves or their child), compared to 21.2% in a 2017 Nemours survey

Telehealth Use In The COVID-19 Era	Adverse SDOH	No SDOH Experiences
Allows greater involvement in child's care	46.5%	21.2%
Allows better access to healthcare providers	33.7%	24.1%
Allows more time with the doctor	24.0%	16.4%
Is more comfortable/can see healthcare provider from home	39.7%	33.2%
Less travel expenses/cost savings	27.6%	22.9%
Avoid potential COVID-19 exposure	51.7%	61.9%

- The Adverse SDOH segment presents greater enthusiasm for telehealth post-COVID

Telehealth Post-COVID Than Before COVID-19	Adverse SDOH	No SDOH Experiences
Use telehealth much more frequently	37.2%	14.2%
Will not use telehealth after in-person care returns to normal	13.0%	25.5%

## But the Adverse SDOH Group Evinces Far Greater Barriers to Future Use

Barriers to Future Telehealth Use	Adverse SDOH	No SDOH Experiences
My phone doesn't have the right apps available	24.8%	4.0%
Might not be able to understand my doctor (e.g., language barrier)	24.4%	5.4%
I don't have reliable internet service	15.7%	4.9%
I don't know if my child's health insurance covers telehealth	18.7%	8.6%
I cannot afford medical care for my child	8.9%	1.0%
I don't know how to use it	13.9%	6.8%
No need or interest in telehealth	7.1%	18.7%

- So there's the challenge: in terms of IDEA, Inclusiveness requires cognizance of the Diversity of the families we serve, in order to provide Equity of Access to our services
- At Nemours, we can appeal to one of our cherished standards of behavior to contribute to the solution:

***Look In the Mirror First; Be Accountable***

# How Nemours Holds Itself IDEA-Accountable

- Nemours telehealth administrator testified to Delaware state legislature for permanent extension of COVID-19 flexibilities enabling those without broadband access or the practical means to get to in-person appointments

- SDOH questionnaire as part of the patient chart

- Our D.R.I.V.E. program

- Diversity
- anti-Racism
- Inclusiveness
- Value
- Equity

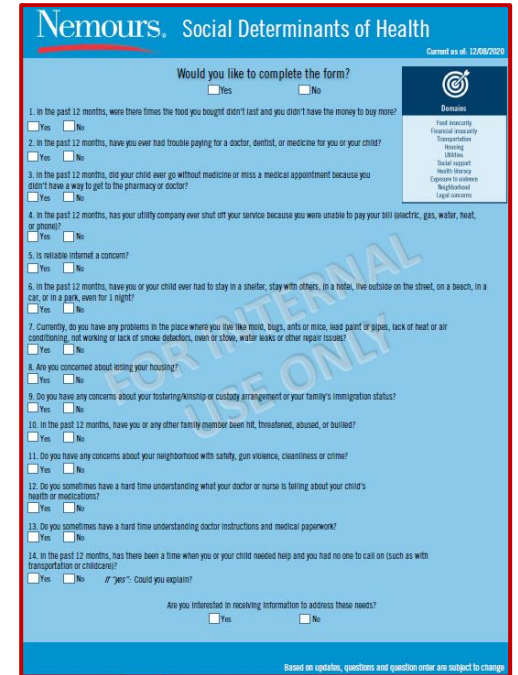
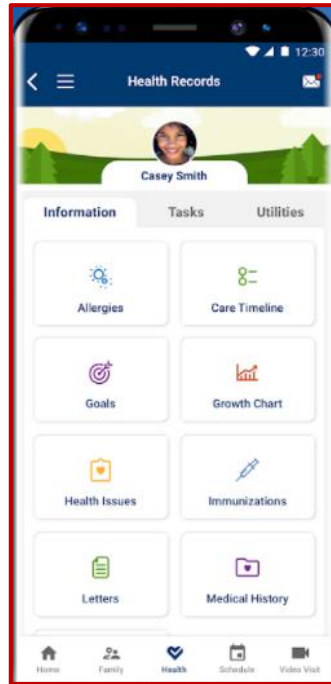


e.g., mandatory Associate education, corporate culture survey on diversity & inclusion, equitable recruitment pipeline, dress code review for sensitivity to culture-specific & gender-specific attire norms, etc

- App development design to aid access equity

- Designing an equitable end-to-end consumer journey from the intake process to the value stream

- The very research discussed today to raise awareness both externally AND internally



# Closing Thoughts for Others Outside of Nemours

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- You can't be part of the fight against inequities if you don't examine the extent and nature of those inequities in your research. Using social determinant questions in your surveys provides a rich source for such examination.
- Having discerned inequities, make sure that your research is not merely descriptive, but prescriptive. Write your surveys and do your analyses to draw conclusions on what actions can be taken to work toward greater equity in access. That is, treat the issues of IDEA the same way you'd treat any insights engagement: the work means nothing without saying what to do with it.
- Publicize your findings, and/or work with your clients to do so. Nemours has the advantage of being a big fish in a little pond (our home state of Delaware); our telehealth business owner has testified before the DE State House Health Committee to push equity measures. But even if you can't do something like that, let your research findings be the voice for those who are IDEA-challenged.
- Take the research you do into IDEA to heart and into your own hallways; live what you find in your research on how to overcome inequities. Hold up that mirror to yourselves and say you will be accountable to each other for fostering IDEA.