### AAP ANAHEIM 2022 experience National Conference & Exhibition

American Academy of Pediatrics



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Associations Between Perceived Financial Distress and Non-medical Out-of-pocket Expenses Among Caregivers of Critically III Children

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### **Disclosure Information**

I have no relevant financial relationships with the manufacturer of any commercial product and/or provider of commercial services discussed in this CME activity.

I do not intend to discuss an unapproved/investigative use of a commercial product/device in my presentation.



## **Critical Illness And Financial Health**

- Financial Toxicity = objective burden and subjective distress
  - Indirect costs include non-medical out-of-pocket expenses (NMOOPEs) such as transportation, housing, childcare, meals
- Critical illness is a source of financial distress with negative long-term consequences
  - Associated with worse outcomes and decreased quality of life (adults with cancer)
  - Limits rehabilitation and recovery post-discharge (adults with ARDS)
  - Those with child-rearing responsibilities may suffer to a greater degree (adults with ARDS)



## What We Know In Pediatrics

- Families with pre-existing financial and social hardships
  - Disproportionate burden from NMOOPEs
  - Highest risk for critical illness
- Despite this association, there are families in every income bracket who experience high financial distress

# What is the distribution of perceived financial distress for families of critically ill children and its relationship to NMOOPEs?



### To compare the relationship of NMOOPEs relative to income and perceived financial distress in families of children admitted to the PICU.



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- Prospective cohort study; time of enrollment was at least 72 hours and no more than 120 hours
- Exclusion criteria: language other than English/Spanish, no permanent address
- Administered the validated InCharge Financial Distress/Financial Well-being (IFDFW) questionnaire, questions on demographics, social influencers of health, and NMOOPEs



2. On the stair steps below, mark (with a circle) how *satisfied* you are with your **present financial situation**. The "1" at the bottom of the steps represents complete dissatisfaction. The "10" at the top of the stair steps represents complete satisfaction. The more dissatisfied you are, the lower the number you should circle. The more satisfied you are, the higher the number you should circle.



#### Dissatisfied

#### 3. How do you feel about your *current financial situation?*

1	2	3	4	5	6	7	8	9	10		
Feel			Sometimes			Not			el		
Overwhelmed			Feel Worried			Worried			Comfortable		

4. How often do you worry about being *able to meet* normal monthly living expenses?

1	2	3	4	5	6	7	8	9	10
Worry All the Time			Sometime Worry	S		Rarely Worry			Never Worry

5. How confident are you that you could find the money to pay for a *financial emergency* that costs about <u>\$1,000</u>?

1	2	3	4	5	6	7	8	9	10
] Confi	No idence	(	Little Confidence	e		Some Confidenc	ce	H Conf	igh ìdence

## **Outcome and Exposure**

### Exposure

- Non-medical Out-of-pocket expenses
  - Costs associated with transportation, meals, childcare, housing
  - Accrued in the last 3 days of the current ICU admission
  - Reported as proportions of the participant's weekly income

### Outcome

- Family experience of financial condition using the InCharge Financial Distress/Financial Well-being (IFDFW) tool
- Trichotomized outcome
  - High financial distress/low financial well-being (score 1.0-4.0)
  - Average financial distress/average financial well-being (score 4.1-6.9)
  - Low financial distress/high financial well-being (score  $\geq 7.0$ )





		Fir	nancial Distre	ss	
	Total Cohort	High Distress	Average Distress	Low Distress	P-value*
	(N = 143)	(N= 40)	(N= 68)	(N= 35)	
Education (%)					
Up Through High School	23.1	37.5	19.1	14.3	0.031
Some college or more	76.9	62.5	80.9	85.7	
Insurance (%)					
Private	52.4	27.5	54.4	77.1	p <0.001
Public	39.9	62.5	38.2	17.1	
No Insurance or Other	7.7	10.0	7.4	5.7	
Marital Status (%)					
Single	26.6	47.5	23.5	8.6	0.001
Partnered	72.7	52.5	75.0	91.4	
No Response	0.01	0	1.5	0	
Race (%)					
Asian	22.6	24.3	24.2	17.6	
Black/African American	15.3	21.6	15.2	8.8	0.001
Hispanic/Latino	19.7	32.4	21.2	2.9	
White	42.3	21.6	39.4	70.6	

\*Pearson Chi-Square or Fisher's Exact Test used to determine significance based on the N within each cell

Proportion of weekly income spent on NMOOPEs (%)^   Image: Spent on Spent Open Open Spent on Spent Open Spent						
Total Cohort   High Distress (N=143)   Average Distress (N=68)   Low Distress (N=68)   P-value <sup>3</sup> Proportion of weekly income spent on NMOOPEs (%)^   (N=40)   (N=68)   (N=35)     Total NMOOPEs (%)^   36.4   12.8   5.10   p <0.001			Fir	ancial Dist	ress	
Cohort (N=143)   Distress (N=40)   Distress (N=68)   Distress (N=35)   P-value <sup>a</sup> Proportion of weekly income spent on NMOOPEs (%)^   -		Total	High	Average	Low	
(N=143)   (N= 40)   (N= 68)   (N= 35)     Proportion of weekly income spent on NMOOPEs (%)^   -   -   -   -     Total NMOOPEs (%)^   36.4   12.8   5.10   p <0.001		Cohort	Distress	Distress	Distress	P-value <sup>a</sup>
Proportion of weekly income spent on NMOOPEs (%)^   Image: spent of NMOOPES		(N=143)	(N= 40)	(N= 68)	(N= 35)	
spent on NMOOPEs (%)^   Image: spent on NMOOPEs (%) (%)   Image: spent on NMOOPEs (%) (%)   Image: spent on NMOOPEs (%) (%)   Image: spent on NMOOPEs (%)   Image: spent on NMOOPE (%)   Image:	Proportion of weekly income					
Total NMOOPEs 36.4 12.8 5.10 p <0.001	spent on NMOOPEs (%) ^					
Food 3.5 1.7 1.4 p <0.001   Childcare 6.7 0 0 0.002   Transportation 6.8 3.5 1.6 p <0.001	Total NMOOPEs		36.4	12.8	5.10	p <0.001
Childcare 6.7 0 0 0.002   Transportation 6.8 3.5 1.6 p <0.001	Food		3.5	1.7	1.4	p <0.001
Transportation 6.8 3.5 1.6 p <0.001   Miscellaneous 5.8 0.8 0.3 0.007   Families concerned for having their utilities discontinued (%) 18.3 41.0 10.3 8.6 p <0.001   Yes 18.3 41.0 10.3 8.6 p <0.001	Childcare		6.7	0	0	0.002
Miscellaneous 5.8 0.8 0.3 0.007   Families concerned for having their utilities discontinued (%) <td>Transportation</td> <td></td> <td>6.8</td> <td>3.5</td> <td>1.6</td> <td>p &lt;0.001</td>	Transportation		6.8	3.5	1.6	p <0.001
Families concerned for having their utilities discontinued (%) Families d	Miscellaneous		5.8	0.8	0.3	0.007
their utilities discontinued (%) Image: Constraint of the initial discontinued (%) Image: Constraint discontined (%) Image: Constraint discontinued (%	Families concerned for having					
Yes 18.3 41.0 10.3 8.6 p <0.001   No 81.7 59.0 89.7 91.4 91.4   Families unable to afford Image: Constraint of the second secon	their utilities discontinued (%)					
No   81.7   59.0   89.7   91.4     Families unable to afford health care (%)   Image: Constraint of the state	Yes	18.3	41.0	10.3	8.6	p <0.001
Families unable to afford health care (%)   Image: Families concerned about   Families concerned about<	No	81.7	59.0	89.7	91.4	
health care (%) 16.8 32.5 11.8 8.6 0.011   No 83.2 67.5 88.2 91.4   Families concerned about	Families unable to afford					
Yes 16.8 32.5 11.8 8.6 0.011   No 83.2 67.5 88.2 91.4   Families concerned about Image: Con	health care (%)					
No   83.2   67.5   88.2   91.4     Families concerned about   Image: Concern	Yes	16.8	32.5	11.8	8.6	0.011
Families concerned about	No	83.2	67.5	88.2	91.4	
	Families concerned about					
housing instability (%)	housing instability (%)					
Yes 13.3 30.0 8.8 2.9 0.001	Yes	13.3	30.0	8.8	2.9	0.001
No 86.7 70.0 91.2 97.1	No	86.7	70.0	91.2	97.1	

"Data was not-normally distributed, so Kruskal-Wallis test used for preliminary analys "Weekly income determined by dividing approximate income by 52 weeks

## Why Should We Care?

- There is an association between attributable out-of-pocket expenses and family distress
- Additional costs for an institution to address some of these concerns could be relatively small
- Such assistance could potentially have significant impact on family well-being





- Further insight into the nature of these expenses and their effects
  - Multi-center study
  - Considering other units such as NICU or CICU
- Opportunities for institutional and community policy interventions
  - Legal advocacy, community referrals, in-hospital counseling
  - IFDFW could be one outcome measure
- Optimize post-discharge outcomes



### Post Intensive Care Syndrome - Pediatrics (PICS-p)



Manning JC, Pinto NP, Rennick JE, Colville G, Curley MAQ. PCCM 2018

## Thank you

- Denise Goodman
- Erin Paquette
- Carolyn Foster
- David Aaby
- Anna Chorniy













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### For more information on this subject, see the following publications:

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#### InCharge Financial Distress/Financial Well-Being Scale©

Directions: Circle or check the responses that are *most appropriate* for your situation.

1. What do you feel is the *level* of your *financial stress today*?

1	2	3	4	5	6	7	8	9	10
O	verwhelmi Stress	ng	Hig Stre	gh ess		Low Stress		No a	Stress t All

2. On the stair steps below, mark (with a circle) how *satisfied* you are with your **present financial situation.** The "1" at the bottom of the steps represents complete dissatisfaction. The "10" at the top of the stair steps represents complete satisfaction. The more dissatisfied you are, the lower the number you should circle. The more satisfied you are, the higher the number you should circle.



#### Dissatisfied

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#### 3. How do you feel about your *current financial situation?*

1	2	3	4	5	6	7	8	9	10
F Overv	Feel whelmed		Sometim Feel Worr	ies ried		Not Worried		Fe Comf	eel fortable

4. How often do you worry about being *able to meet* normal monthly living expenses?

	1 2	3	4	5	6	7	8	9 10		
EX	Worry		Sometimes			Rarely			Never	



5. How confident are you that you could find the money to pay for a *financial emergency* that costs about **\$1,000**?

1	2	3	4	5	6	7	8	9	10
Conf	No		Little Confidence			Some Confidenc	e	H Conf	igh idence

6. How often does this happen to you? You want to go out to eat, go to a movie or do something else and <u>don't go because you can't afford to?</u>

1	2	3	4	5	6	7	8	9	10
All th	All the time		Sometim	es		Rarely			Never

7. How frequently do you find yourself just getting by financially and living *paycheck to paycheck*?

1	2	3	4	5	6	7	8	9	10
All t	All the time		Sometimes			Rarely			Never

8. How stressed do you feel about your personal finances in general?

1	2	3	4	5	6	7	8	9	10
Over	whelming Stress	g	High Stress			Low Stress		No a	o Stress t All

### **Phone vs In- Person Recruitment**





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