



## Background:

- Chronic medical illness during childhood can significantly impact a child's academic development, as well as their psychosocial functioning<sup>1</sup>
- Medical Day Treatment (MDT): a unique hospital school that provides medical, educational, and psycho-social support to children (ages 7-21) with chronic medical diagnoses**
  - Multidisciplinary approach to treatment
  - Typical length of stay is 1 year
- Patient Population
  - Medical Diagnoses: diabetes, cancer, epilepsy, hematological disorders, asthma, solid organ transplant
  - Psychiatric Diagnoses: anxiety, depression, adjustment disorders, PTSD
- Family involvement and collaboration with medical providers improves overall patient care
- Family satisfaction is important to the success of the program
- Provider feedback can improve early identification of patients and the referral/admission process

## Objectives:

- Gather family and provider satisfaction data regarding experiences with MDT
- Analyze feedback to understand family and provider experiences with MDT and identify strengths and areas for growth

## Methods:

### Participants:

- Caregivers of currently admitted patients
- CHCO providers who have referred patients to MDT (GI, Oncology, Social Work, Special Care Clinic, Kidney Center, Neurology, Rehab, Anesthesiology, Pulmonary, Solid Organ Transplant Surgery, PMHI, CCBD, Rheumatology)

### Measures:

- Family Satisfaction Survey:** 12 items, open-ended and Likert type scale questions (0-4 scale, extremely dissatisfied-extremely satisfied)
- Provider Satisfaction Survey:** 7 items, open-ended questions and slider scale questions (0-100 scale, highly dissatisfied-highly satisfied)

### Procedures:

- Family Satisfaction Surveys:** Voluntary, anonymous, paper and pencil survey completed at mid-year and discharge over a 4 year period (2013-2017)
- Provider Satisfaction Surveys:** Voluntary, anonymous, electronic survey sent to frequently referring providers via REDCap in 2016
- Written responses were analyzed using principles of Consensual Qualitative Research-Modified (CQR-M)<sup>2</sup>
  - Responses were reviewed and initial categories developed through consensus oriented discussion
  - Team members individually coded data into the initially agreed upon categories
  - Codes and categories were reviewed and revised as a team for any discrepancies into the finalized categories and subcategories
  - Frequencies of each category and sub category were calculated
- Mean scores and standard deviations from Likert and slider scale responses were calculated

Open-Ended Family Satisfaction Survey Questions	Open-ended Provider Satisfaction Survey Questions
1. Please share any suggestions you have for MDT to improve in the future	1. Suggestions for improving referral process
2. Please share any other general feedback you have for the MDT program	2. Ways my patients have benefitted from MDT
	3. Other feedback

## Results:

### Family Survey Data and Categories: N=126

Likert Scale Questions	Mean (SD)	Likert Scale Questions	Mean (SD)
1. Overall satisfaction with MDT:	3.7 (0.6)	5. Child's overall functioning since attending MDT:	3.5 (0.7)
2. Satisfaction with nursing and medical care:	3.8 (0.5)	6. Child's health and physical functioning since attending MDT:	3.4 (0.8)
3. Satisfaction with teachers and educational support:	3.7 (0.6)	7. Child's academic/educational functioning since attending MDT:	3.4 (0.7)
4. Satisfaction with mental health services:	3.7 (0.6)	8. Child's emotional and social functioning since attending MDT:	3.4 (0.8)

Perceived Benefits to Child/Family 48% of total responses	<b>Medical (16%)</b> <ul style="list-style-type: none"> <li>"...the medical support has been awesome and given me (mom) a mental break from worry"</li> </ul>	<b>Educational (18%)</b> <ul style="list-style-type: none"> <li>"I really like how the staff take the time with the children to work on them. Since the classes are small they are more 1 on 1 with the kids"</li> </ul>
	<b>Psychosocial (39%)</b> <ul style="list-style-type: none"> <li>"The staff and structure of the program have taught her coping and management skills she would not have gotten anywhere else"</li> </ul>	<b>Overall Support (27%)</b> <ul style="list-style-type: none"> <li>"We appreciate MDT so much for all the support in and outside the facility. During extremely difficult times-phone support, encouragement and all your at home suggestions"</li> </ul>

General Gratitude for the Program 41% of total responses	<ul style="list-style-type: none"> <li>"We are so thankful for MDT &amp; all it has meant for our child's quality of life"</li> <li>"I would just like to thank you all! My child is in the best place and feel at ease. You all are amazing"</li> <li>"I just want to thank the staff for accepting and caring for my baby. He loves it here and I'm glad we made the choice to bring him here. Keep up the great work."</li> </ul>
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Suggested Changes 30% of total responses	<b>Communication (28%)</b> <ul style="list-style-type: none"> <li>"call parents when the situation changes or child needs anything"</li> </ul>	<b>Education (9%)</b> <ul style="list-style-type: none"> <li>"I wish the education piece was stronger and more interactive"</li> </ul>
	<b>Transportation (12.5%)</b> <ul style="list-style-type: none"> <li>"Any communication when a child is waiting longer for transportation to arrive"</li> </ul>	<b>Other (50%)</b> <ul style="list-style-type: none"> <li>More family events, more engaging activities for older children, more support for anxiety, and greater variety in food choices</li> </ul>

Program Strengths 5% of total responses	<b>Communication (60%)</b> <ul style="list-style-type: none"> <li>"All of my inquiries were handled thoroughly and in a timely fashion"</li> <li>"Excellent staff, always responsive to need/concerns"</li> </ul>
	<b>Collaboration (40%)</b> <ul style="list-style-type: none"> <li>"The collaboration b/t all the aspects of care a special needs child needs was so helpful in making our child's life well rounded without things falling through the cracks. MDT got him back on track so he can lead a full life..."</li> </ul>

### References/Acknowledgements

<sup>1</sup>DuPaul, G.J., & Shapiro, E.S. (2017). Schools and reintegration into schools. In M.C. Roberts & R.G. Steele (Eds.), *Handbook of Pediatric Psychology, 5th Edition* (580-593). New York: The Guilford Press.

<sup>2</sup>Hill, C.E., Sprangler, P.T., and Jingqing, L. (2012). Consensual Qualitative Research for Simple Qualitative Data: An Introduction to CQR-M. In C.E. Hill (Ed.), *Consensual Qualitative Research: A Practical Resource for Investigating Social Science Phenomena, 1st Edition* (269-283). Washington D.C.: American Psychological Association. 269-83.

## Results (Continued):

### Provider Survey Data and Categories: N=37

Slider Scale Questions	Mean (SD)	Slider Scale Questions	Mean (SD)
1. Satisfaction with referral process	84.1 (23)	3. Satisfaction with overall care patients received	89.4 (19.2)
2. Satisfaction with collaboration and communication between MDT and your team	84.3 (22.9)	4. Likelihood of referring a patient within the next year	85.7 (19.2)

Benefits of the Program 89.5% of total responses	<b>Medical (37%)</b> <ul style="list-style-type: none"> <li>Increased adherence</li> <li>Consistency of care</li> </ul>	<b>Educational (32.5%)</b> <ul style="list-style-type: none"> <li>Increased academic engagement</li> <li>Increased attendance</li> </ul>
	<b>Psychosocial (30%)</b> <ul style="list-style-type: none"> <li>"Improvement in isolation associated with condition, enhanced mental health, normalization"</li> </ul>	
Barriers to the Referral Process 27% of total responses	<b>Admission Criteria (23%)</b> <ul style="list-style-type: none"> <li>"I have not been able to get a patient admitted as they typically are too much of a behavioral concern for the classroom"</li> </ul>	<b>Program Related Factors (77%)</b> <ul style="list-style-type: none"> <li>More communication</li> <li>Need for more information about MDT</li> <li>Need for orders in Epic</li> </ul>
	<b>Positive Feedback</b> 25% of total responses <ul style="list-style-type: none"> <li>"The referral process wasn't difficult and staff worked hard to make it happen for my patient"</li> <li>"MDT is an amazing and unique program. I love referring to MDT because I know it is a great program that will provide comprehensive and quality care"</li> </ul>	

## Conclusions and Future Directions:

- Majority of responses were positive and expressed perceived benefits of MDT
- Family Surveys** offered suggestions for improving MDT by enhancing communication, transportation, and education
- Provider Surveys** offered more specific feedback about barriers to the referral process
- Feedback is informing efforts to strengthen the program. Examples:
  - MDT staff are attending medical team meetings to increase communication and collaboration with CHCO
  - Referrals have been changed from handwritten to electronic orders in Epic
  - Family treatment meetings have been established once a month with caregivers to improve communication between MDT and families

### Limitations

- Responding to surveys was voluntary
- Family and Provider Surveys were anonymous, therefore relationships between feedback and patient characteristics cannot be examined
- Provider Surveys were not given immediately after referral, therefore may not capture feedback in real time

### Future plans:

- Consider administering provider survey shortly after a patient is admitted to MDT
- Ask more specific questions about family satisfaction and child functioning
- Include patient specific satisfaction to gain perspectives of individual patients
- Additional qualitative data collection with patients and families to better understand experiences with MDT including strengths and weaknesses
- Administer quantitative questions for family/patient satisfaction via Redcap to improve efficiency of data collection
- Overall, MDT will utilize the feedback to identify additional strategies for improving the program and strengthening patient care**