Original Paper

Parent and Caregiver Perspectives on the Reach Out to Youth Health Care Pathway Program: Cross-Sectional Survey Study

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Abstract

Background: Underrepresented minority groups make up a smaller share of physicians than of the US population. While early health care exposure enhances career interest among underrepresented minority youth, limited research examines how parental engagement influences motivation to support children's medical aspirations. The Reach Out To Youth (ROTY) program provides parallel workshops for children and parents to foster family engagement.

Objective: This study evaluated adult family respondents' satisfaction with ROTY, their perceptions of how attainable a health care career is for their children, and their intended engagement to support their children's interest.

Methods: We conducted a cross-sectional, postevent-only survey of adult family members (parents, guardians, and other accompanying adults) attending ROTY events hosted by Michigan State University College of Human Medicine in 2024 and 2025. An 18-item questionnaire assessed demographics, program satisfaction, postevent perceptions of career attainability, and engagement intentions; no baseline survey was administered, so all results describe postevent perceptions rather than measured change. Proportions are reported with counts and 95% CIs. Open-ended feedback underwent inductive thematic analysis.

Results: Among 73 respondents, 63 (86.3%) were parents or legal guardians, 16 (21.9%) were born outside the United States, and 47 (64.4%) held a bachelor's degree or higher. All respondents (73/73, 100%; 95% CI 95.1%-100%; Clopper-Pearson interval) would recommend ROTY to other families, and 74.0% (54/73) rated it as "very interesting." In total, 71.2% (52/73) of respondents (95% CI 60.8%-81.6%) reported that a health care career seemed more attainable for their children after the event, and the remaining 28.8% (21/73) answered "maybe." Almost all (72/73, 98.6%) intended to continue discussing topics from the event at home. Engaging children in science events was the most endorsed engagement strategy (72/73, 98.6%), and 72.6% (53/73) endorsed the need for greater minority group representation in health care as a reason to encourage health care careers. Thematic analysis of open-ended responses from 39 of 73 (53.4%) respondents identified 8 themes; because responses were multiply coded, theme frequencies overlapped, led by program quality and organization (30/39, 76.9%) and suggestions for improvement (14/39, 35.9%). Respondents' suggestions centered on clearer pre-event communication, expansion to more age groups, and school- and community-based outreach.

Conclusions: Respondents attending ROTY reported very high satisfaction, and most rated health care careers as seeming more attainable for their children after the event. Experiential learning, visible diversity, and parallel parent-child programming were among the elements respondents valued. These findings support further evaluation of dual-generation programs with pretest-posttest and longitudinal designs.

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Keywords: health care workforce diversity; pathway programs; parental engagement; underrepresented minority groups; medical education; science, technology, engineering, and mathematics; STEM

Introduction

Background

Increasing diversity in medicine is critical for addressing health disparities and improving outcomes for underserved communities [1]. However, the proportion of individuals from underrepresented minority groups remains disproportionately low among medical school enrollees [2]. Patient-physician racial concordance is strongly associated with higher patient satisfaction, better communication, and increased trust [3]. Consequently, the persistent demographic mismatch between physicians and the general population highlights an urgent need for interventions that effectively expand the underrepresented minority group pipeline [4].

Underrepresented minority students face numerous barriers, including limited exposure to medical role models, inadequate mentorship, and scarce career development resources [5,6]. Early exposure to health care professions through outreach programs effectively enhances career interest [4,7]. Furthermore, parental involvement is one of the strongest predictors of children's academic achievement and career aspirations [8,9]. For underrepresented minority youth in particular, robust parental support is crucial for overcoming systemic barriers to careers in medicine [10].

Study Objectives

Recognizing the importance of early exposure and parental engagement, the Reach Out To Youth (ROTY) initiative was founded in 1990 at the Wayne State University School of Medicine to support underrepresented youth exploring careers in medicine [11]. It has since been adopted by other Michigan medical schools [12]. This study evaluated the newer ROTY program at Michigan State University College of Human Medicine (MSU CHM) [13], a one-day program with a dual-curriculum approach. This includes parallel interactive workshops for children (ages of 7-11 years) and their parents. The parental component equips caregivers with tools to nurture their children's interest in medicine and navigate educational pathways.

While the theoretical value of engaging parents in such initiatives is widely recognized, limited empirical research exists regarding how these family-centered outreach programs are perceived by the families they engage. To address this gap, this paper describes respondents' program satisfaction, postevent perceptions of medical career attainability for their children, and reported intentions to support their children's interest among adult family members attending ROTY. By characterizing these perceptions, we aim to inform the design of dual-generation strategies for diversifying the medical pipeline.

Methods

Study Design and Setting

We conducted a cross-sectional survey of adult family members (parents, guardians, and other accompanying adults) attending ROTY events hosted by MSU CHM during 2024 and 2025. The survey was administered once at the conclusion of each event. No baseline (pre-event) survey was administered. All quantitative results therefore describe postevent perceptions and intentions rather than measured change.

The same 18-item instrument and the same paper-based end-of-event administration procedure were used at both events. Of the 73 completed surveys, 32 were collected in 2024 and 41 in 2025; 85 adult family members attended across the 2 events. Because surveys were anonymous, individuals who attended both events could not be identified, so repeat participation across years cannot be excluded; the analytic dataset therefore comprises 73 completed surveys rather than 73 confirmed unique respondents. Because the 2025 parent program was revised in response to 2024 feedback, the pooled results represent 2 related but not identical program versions.

The ROTY Program

ROTY is an annual, one-day pipeline program founded in February 1990 at the Wayne State University School of Medicine, where it was created by then–medical student Carolyn King through the school's Student National Medical Association (SNMA) chapter and continues to run annually [11,12]. The program studied here is the newer implementation at MSU CHM hosted at the Secchia Center in Grand Rapids, Michigan, and organized by the college together with its own SNMA chapter [13]. The 2 events surveyed, the college's 10th (February 24, 2024; themed "Map Your Mind!") and 11th (February 22, 2025; themed "Flex Your Superpower!") annual programs, lasted approximately 5 hours each (8 AM to 1 PM), with continental breakfast and lunch provided. Children aged 7 to 11 years rotated in small groups through 4 hands-on workstations led by medical student volunteers (2024: physician specialties, brain anatomy and function, the eye and vision, and clinical skills; 2025: electrophysiology, muscle elasticity, frog dissection, and clinical skills), followed by an age-appropriate session on the cycle of life. Parents and caregivers attended a parallel curriculum in a separate room, consisting of presentations by faculty physicians (including the program's cofounders), medical students, and community health educators that linked the year's theme to family health (eg, hypertension, common workplace overuse injuries, and nutrition), together with guidance on nurturing children's interest in science and medicine. Each event was supported by approximately 60 to 80 medical student volunteers, many of them members of SNMA, an organization of medical students underrepresented in medicine. Families were recruited through community

flyers distributed in English and Spanish, regional television and podcast coverage, and social media. Programming was delivered in English, and Spanish-speaking volunteers were available to interpret for children and parents. Attendance was free of charge.

Participants

Eligible participants were parents, guardians, grandparents, or other adult family members who accompanied children to ROTY events. All adult attendees were invited to complete the survey at the conclusion of each event. Participation was voluntary and anonymous.

Ethical Considerations

This study was determined to be exempt by the Michigan State University Institutional Review Board (STUDY00010364; exempt under Title 45 of the Code of Federal Regulations part 46.104(d), category 2(ii); determination date: February 16, 2024). Participation was voluntary, and implied informed consent was obtained from all participants prior to survey completion. No identifiable personal information was collected in the analytic dataset; optional contact information volunteered for future program communication was stored separately and not linked to survey responses, ensuring participant privacy and confidentiality. Participants were not compensated for completing the survey.

Instrument Development

We developed an 18-item questionnaire based on literature review and recent program evaluation recommendations [4]. The survey included demographics (items 1-5; relationship to the child, age group, birthplace, educational level, and science education background), program history (item 6; prior ROTY attendance), program satisfaction (items 7-9; general impression, enjoyment level, and recommendation likelihood), career influence (items 10-11; reasons to encourage health care careers and perceived career attainability after ROTY), parental engagement (items 12-15; effective engagement strategies, intention to continue discussions, familiarity with school curriculum, and importance of parental involvement), qualitative feedback (item 16; open-ended comments and suggestions), and follow-up (items 17-18; willingness to be contacted for future discussions). The survey did not collect race or ethnicity; region of birth was the only origin-related item. The full instrument is provided in Multimedia Appendix 1.

Data Collection

Surveys were administered via paper forms at the conclusion of each ROTY event (February 24, 2024, and February 22, 2025); a dedicated survey period was built into the parent program schedule. Research assistants provided brief instructions and ensured participant privacy.

Data Analysis

Descriptive statistics (frequencies and percentages) characterized the sample and response distributions; raw counts are reported alongside all percentages, and item-level denominators are used where individual items had missing responses. For key outcomes (career attainability and program satisfaction), we calculated proportions with 95% CIs using the Wald method; exact Clopper-Pearson intervals were used where proportions approached 0% or 100%. Means and SDs are reported for the parental involvement rating. All analyses were conducted using Python (version 3.9; Python Software Foundation).

Qualitative Analysis

Open-ended responses underwent inductive thematic analysis [14]. Two investigators independently coded responses to develop a preliminary coding scheme. Codes were iteratively refined and organized into broader themes. Disagreements were resolved through discussion. Representative quotes were selected to illustrate each theme. Responses were multiply coded: each response was assigned every theme it addressed and could therefore contribute to more than one theme. Across the 39 substantive responses, there were 83 theme assignments (mean 2.1, SD 1.0 themes per response). Theme percentages were calculated on the 39 responses and summed to more than 100%. Theme frequency indicates how often each theme appeared and is not a measure of the relative importance of themes. The complete response-by-response coding is provided in Multimedia Appendix 2.

Results

Participant Characteristics

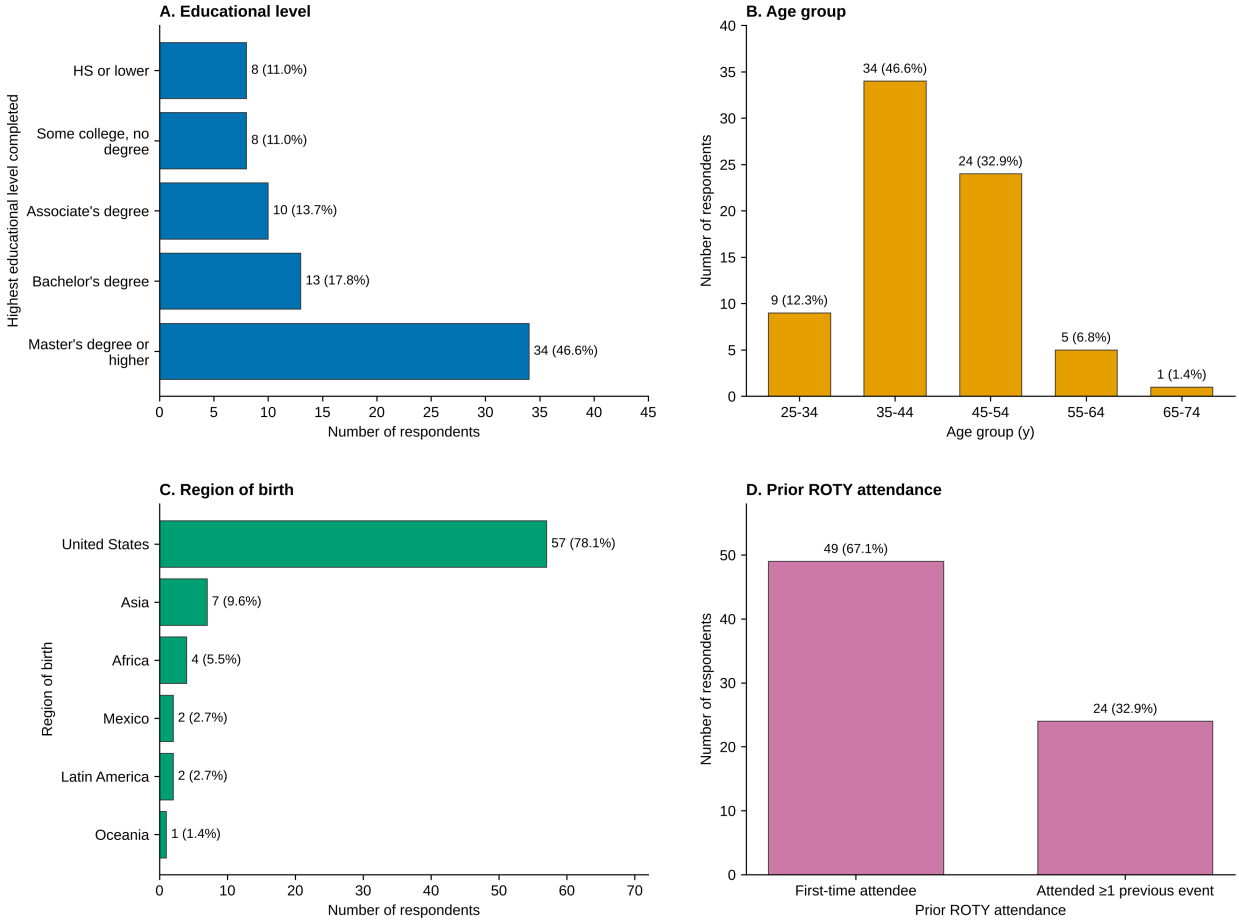
Across the 2 events, 85 adult family members attended and 73 completed the survey (32 in 2024 and 41 in 2025; response rate 85.9%; Table 1 and Figure 1). Most were parents or legal guardians (63/73, 86.3%), with smaller proportions of grandparents (n=6, 8.2%) and other relationships (n=4, 5.5%). The age distribution showed concentration in the 35- to 44-year age group (n=34, 46.6%), followed by 45 to 54 years (n=24, 32.9%). Most participants (n=57, 78.1%) were born in the United States, with the remainder born in Asia (n=7, 9.6%), Africa (n=4, 5.5%), Mexico (n=2, 2.7%), Latin America (n=2, 2.7%), and Oceania (n=1, 1.4%). Race and ethnicity were not collected.

Table 1. Demographic characteristics of adult family respondents at Reach Out To Youth (ROTY) events (2024-2025; N=73).

Characteristics	Participants, n (%)
Relationship to the child	
Parent or legal guardian	63 (86.3)
Grandparent	6 (8.2)
Other (eg, stepfather, godparent, great-aunt, or teacher)	4 (5.5)
Age group (y)	
25-34	9 (12.3)
35-44	34 (46.6)
45-54	24 (32.9)
55-64	5 (6.8)
65-74	1 (1.4)
Region of birth	
United States	57 (78.1)
Asia	7 (9.6)
Africa	4 (5.5)
Mexico	2 (2.7)
Latin America	2 (2.7)
Oceania	1 (1.4)
Highest educational level completed	
Elementary or lower	1 (1.4)
High school diploma or GED[a]	7 (9.6)
Some college, no degree	8 (11.0)
Associate's degree	10 (13.7)
Bachelor's degree	13 (17.8)
Master's degree	27 (37.0)
Professional degree (MD/DO, JD, or DDS)	3 (4.1)
Doctorate degree	4 (5.5)
Highest level of science studied (n=72)	
None beyond elementary school	2 (2.8)
High school science	22 (30.6)
Undergraduate level	42 (58.3)
Professional level	6 (8.3)
Prior ROTY attendance	
First-time attendee	49 (67.1)
Attended ≥1 previous event	24 (32.9)

[a]GED: general educational development.

Figure 1. Demographic characteristics of the 73 adult family respondents surveyed at Reach Out To Youth (ROTY) events (2024-2025): (A) educational level, (B) age group, (C) region of birth, and (D) prior ROTY event attendance. HS: high school.



Educational attainment was high: 64.4% (47/73) held a bachelor's degree or higher, including 37.0% (27/73) with master's degrees and 9.6% (7/73) with professional or doctoral degrees. Regarding science education background (72 item responses), 58.3% (42/72) studied science at the undergraduate level, 30.6% (22/72) studied science at the high school level, and 8.3% (6/72) studied science at the professional level.

Two-thirds were first-time ROTY attendees (49/73, 67.1%), while 32.9% (n=24) had attended at least one previous event.

Program Satisfaction and Outcomes

Program satisfaction was high (Table 2 and Figure 2). Three-quarters of respondents (54/73, 74.0%; 95% CI 63.9%-84.0%) rated ROTY as "very interesting," while 24.7% (n=18) found it "interesting" and 1.4% (n=1) found it "not so interesting." Regarding enjoyment, 63.0% (n=46; 95% CI 51.9%-74.1%) "loved it," 27.4% (n=20) "enjoyed it very much," and 9.6% (n=7) "enjoyed it some." All participants (n=73, 100%; 95% CI 95.1%-100%; Clopper-Pearson interval) would recommend ROTY to other families.

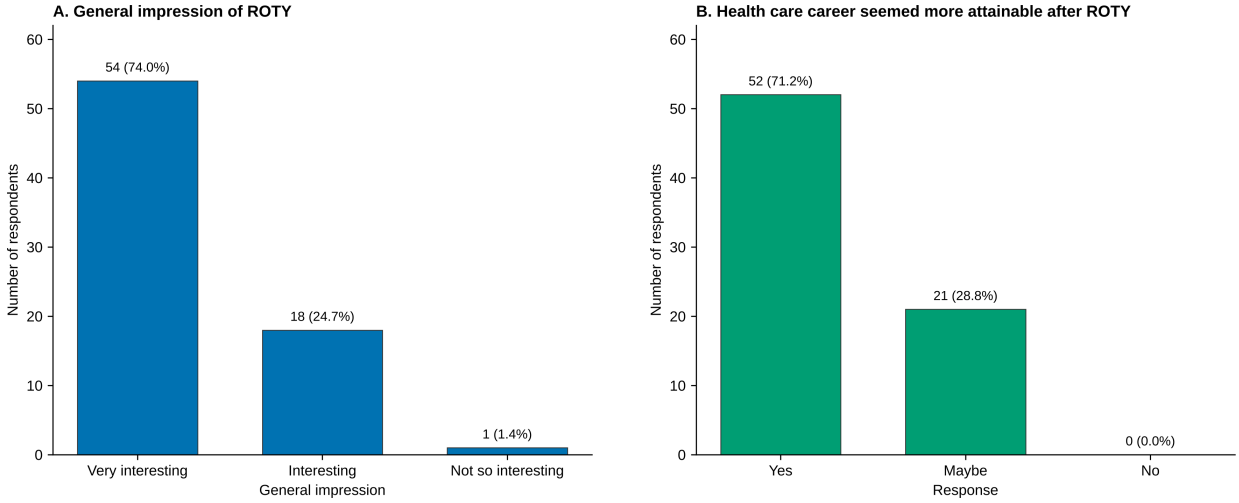
Table 2. Program satisfaction and postevent perceptions among adult family respondents at Reach Out To Youth (ROTY) events (2024-2025; N=73).

Item and response	Participants, n (%; 95% CI)
General impression of ROTY	
Very interesting	54 (74.0; 63.9-84.0)
Interesting	18 (24.7; 14.8-34.6)
Not so interesting	1 (1.4; 0.0-7.4[a])
Enjoyment of the event	
Loved it	46 (63.0; 51.9-74.1)
Enjoyed it very much	20 (27.4; 17.2-37.6)
Enjoyed it some	7 (9.6; 2.8-16.3)
Would recommend ROTY to other families	
Yes	73 (100; 95.1-100[a])

Item and response	Participants, n (%; 95% CI)
Health care career seemed more attainable for children after ROTY (postevent rating)	
Yes	52 (71.2; 60.8-81.6)
Maybe	21 (28.8; 18.4-39.2)
No	0 (0; 0.0-4.9[a])
Would continue discussing event topics at home	
Yes	72 (98.6; 92.6-100[a])
Maybe	1 (1.4; 0.0-7.4[a])

[a]Exact Clopper-Pearson interval (used where proportions approach 0% or 100%).

Figure 2. Program satisfaction and postevent perceptions of health care career attainability among the 73 adult family respondents at Reach Out To Youth (ROTY) events (2024-2025): (A) general impression of ROTY events and (B) whether a health care career seemed more attainable after ROTY events.



In one-time ratings collected at the conclusion of each event, 71.2% (52/73) of respondents (95% CI 60.8%-81.6%) reported that a career in health care seemed more attainable for their children after attending ROTY, with the remaining 28.8% (n=21) indicating "maybe" and none answering "no." This item was administered only after the event and, therefore, reflects respondents' retrospective postevent perception, not a demonstrated increase in perceived attainability. Nearly all respondents (n=72, 98.6%) planned to continue discussing topics from the event at home with their children.

Parental Motivation and Engagement

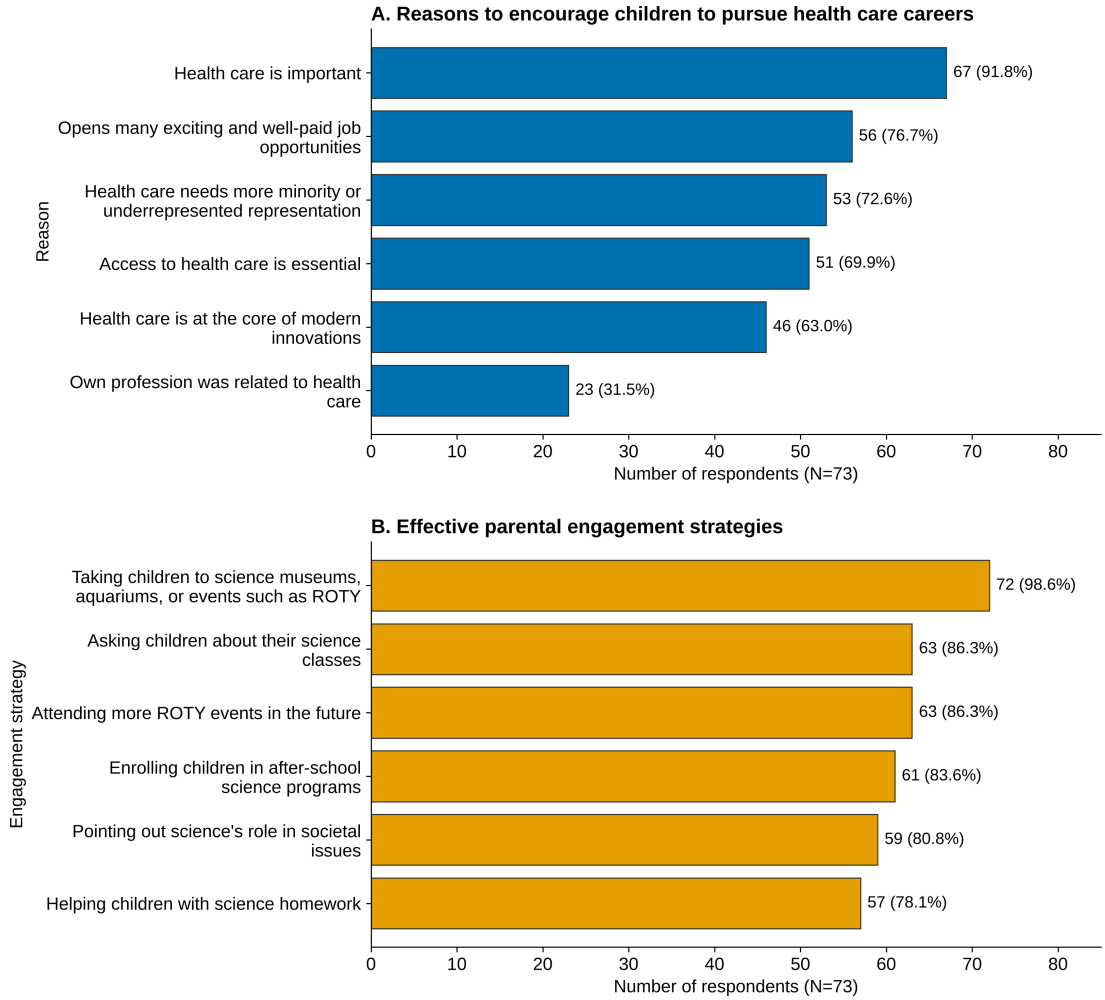
Respondents endorsed multiple reasons for encouraging health care careers (Table 3 and Figure 3). The most frequently selected reasons were that health care is important (67/73, 91.8%), that it opens many exciting and well-paid job opportunities (n=56, 76.7%), that health care needs more minority or underrepresented representation (n=53, 72.6%), and that access to health care is essential (n=51, 69.9%). Nearly three-quarters of participants endorsed diversity in health care as a reason to encourage these careers.

Table 3. Reasons for encouraging health care careers and endorsed parental engagement strategies ("select all that apply") among adult family respondents at Reach Out To Youth (ROTY) events (2024-2025; N=73).

Items	Participants, n (%)
Reasons to encourage a health profession	
Health care is important	67 (91.8)
Opens many exciting and well-paid job opportunities	56 (76.7)
Health care needs more minority or underrepresented representation	53 (72.6)
Access to health care is essential	51 (69.9)
Health care is at the core of modern innovations	46 (63.0)
Own profession was related to health care	23 (31.5)
Other	6 (8.2)
Endorsed engagement strategies	
Taking children to science museums, aquariums, or events such as ROTY	72 (98.6)

Items	Participants, n (%)
Asking children about their science classes	63 (86.3)
Attending more ROTY events in the future	63 (86.3)
Enrolling children in after-school science programs	61 (83.6)
Pointing out science's role in societal issues	59 (80.8)
Helping children with science homework	57 (78.1)
Other	6 (8.2)

Figure 3. Reasons adult family respondents endorsed for encouraging health care careers and engagement strategies they considered effective ("select all that apply") among the 73 respondents at Reach Out To Youth (ROTY) events (2024-2025): (A) reasons to encourage children to pursue health care careers and (B) effective parental engagement strategies.

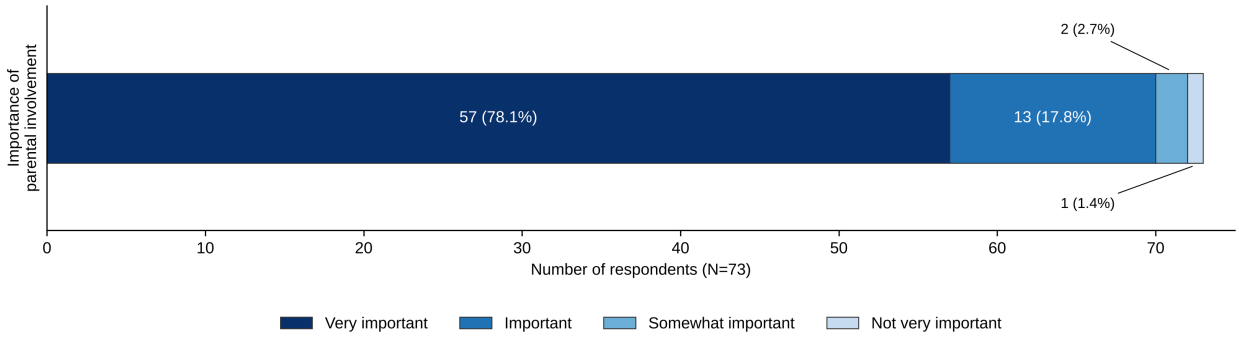


Regarding effective parental engagement strategies (Table 3 and Figure 3), the highest-endorsed approaches were taking children to science museums, aquariums, or events such as ROTY (72/73, 98.6%); asking children about science classes (n=63, 86.3%); attending more ROTY events in the future (n=63, 86.3%); enrolling in after-school science programs (n=61, 83.6%); pointing out science's role in societal issues (n=59, 80.8%); and helping with science homework (n=57, 78.1%). These items describe which forms of family engagement respondents considered actionable after the event.

Importance of Parental Involvement

Respondents overwhelmingly viewed parental involvement as important (Figure 4): 78.1% (57/73) rated it as "very important," 17.8% (n=13) rated it as "important," 2.7% (n=2) rated it as "somewhat important," and 1.4% (n=1) rated it as "not very important." The mean importance rating was 4.73 (SD 0.58) on a 5-point scale (observed range 2-5). This near-universal endorsement (n=70, 95.9% rating it as important or very important) shows respondents' understanding of their role in shaping children's educational and career trajectories.

Figure 4. Ratings of the importance of parental involvement in children's science education among the 73 adult family respondents at Reach Out To Youth events (2024-2025).



Despite this recognition, only 19.2% (14/73) of respondents were "very familiar" with their children's school science curriculum, while 63.0% (n=46) were "somewhat familiar" and 17.8% (n=13) were "not familiar at all," suggesting opportunity for enhanced school-home communication.

Qualitative Themes

Overview

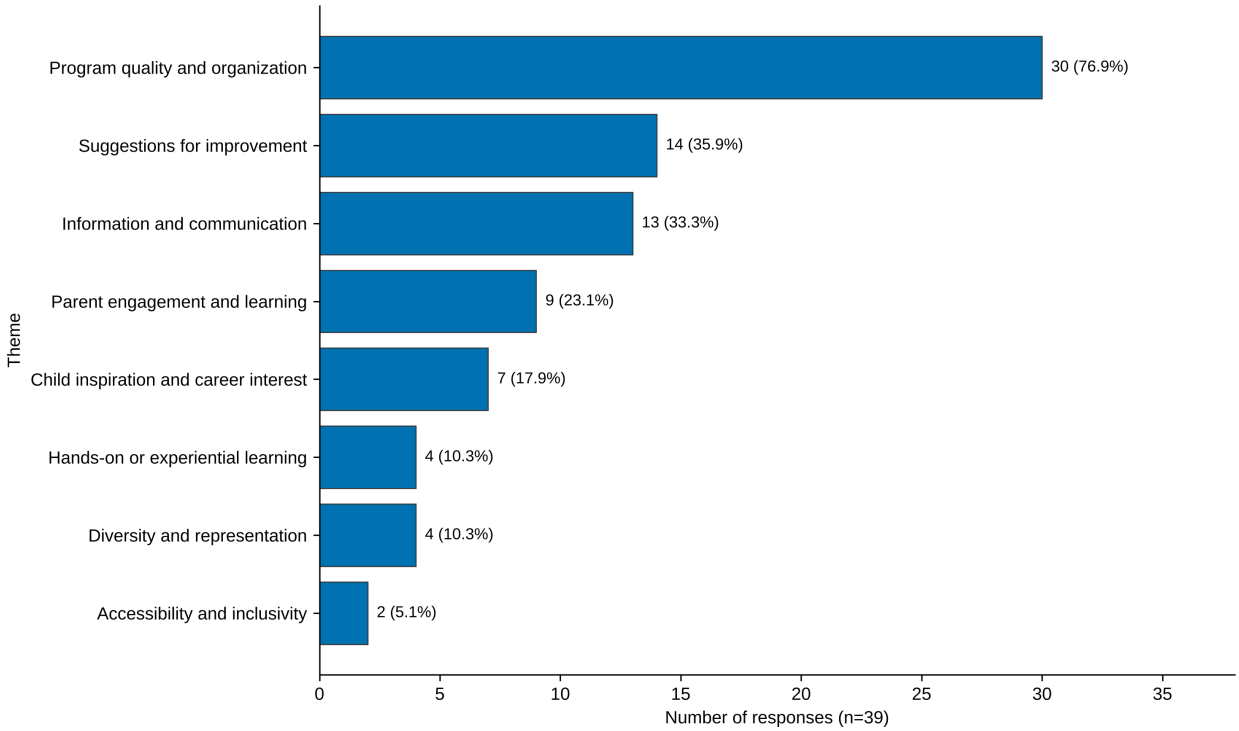
Of the 73 respondents, 39 (53.4%) provided substantive open-ended feedback, including one response written in Spanish. Inductive thematic analysis identified 8 major themes (Table 4 and Figure 5). Because responses were multiply coded, a response could contribute to more than one theme, so theme percentages sum to more than 100%.

Table 4. Themes from inductive thematic analysis of open-ended feedback from adult family respondents at Reach Out To Youth events (2024-2025; n=39 substantive responses)[a].

Themes	Participants, n (%)	Illustrative quote
Program quality and organization	30 (76.9)	"Excellent! Every year it seems like it levels up. Allowing parents to do one of the experiments this year was impactful on so many levels."
Suggestions for improvement	14 (35.9)	"More info before we arrived. So we would know what to expect."
Information and communication	13 (33.3)	"Lots of USEFUL information that was relayed in a positive/fun and engaging way."
Parent engagement and learning	9 (23.1)	"Keeping the parents engaged and learning throughout the session was great."
Child inspiration and career interest	7 (17.9)	"My son told me he wants to be a doctor just from seeing everyone in the atrium when we arrived."
Hands-on or experiential learning	4 (10.3)	"What a wonderful way to give kids opportunities and hands-on experience to learn about science."
Diversity and representation	4 (10.3)	"It is important for him to learn from and see people of color in these roles. ...More people of color in healthcare is better for everyone."
Accessibility and inclusivity	2 (5.1)	"Thank you for the translation services. We are a latino family and this was a great way to get Spanish speakers involved."

[a]Responses were multiply coded; each response could be assigned to more than one theme. Counts sum to 83 theme assignments across 39 responses and percentages, calculated on 39 responses, sum to more than 100%.

Figure 5. Distribution of themes from inductive thematic analysis of 39 substantive open-ended responses from adult family respondents at Reach Out To Youth events (2024-2025). Responses were multiply coded, so percentages sum to more than 100%.



Program Quality and Organization

Respondents (30/39, 76.9%) praised the event's organization, speaker quality, and overall execution: "Excellent! Every year it seems like it levels up. Allowing parents to do one of the experiments this year was impactful on so many levels."

Suggestions for Improvement

Constructive feedback (14/39, 35.9%) was specific and actionable. Respondents asked for more detailed pre-event information about the day's schedule and content ("More info before we arrived. So we would know what to expect"), expansion to additional age groups ("Suggestion: Include more age groups"), coaching for presenters on organization and delivery ("Work with presenters on presentation organization, flow and oral skills"), smoother event logistics such as organizing children's dismissal lines by group color, more interactive activities for parents ("Would love a little more interactive activities for parents! Ex: Stretching/blood pressure checks"), additional programming between annual events ("host a community pop-up or discussion on campus in between the main/capstone event"), more events throughout the year, and recruitment through schools serving communities of color.

Information and Communication

Respondents (13/39, 33.3%) valued educational content: "Lots of USEFUL information that was relayed in a positive/fun and engaging way."

Parent Engagement and Learning

Respondents (9/39, 23.1%) appreciated the dedicated parent programming: "Keeping the parents engaged and learning throughout the session was great."

Child Inspiration and Career Interest

Respondents (7/39, 17.9%) commented on their children's inspiration and career interest: "My son told me he wants to be a doctor just from seeing everyone in the atrium when we arrived."

Hands-On or Experiential Learning

Respondents (4/39, 10.3%) valued practical, interactive activities for both children and adults: "What a wonderful way to give kids opportunities and hands-on experience to learn about science."

Diversity and Representation

There was explicit appreciation for exposure to diverse health care professionals (4/39, 10.3%): "It is important for him to learn from and see people of color in these roles. ... More people of color in healthcare is better for everyone."

Accessibility and Inclusivity

Efforts to accommodate diverse families were recognized (2/39, 5.1%): "Thank you for the translation services. We are a latino family and this was a great way to get Spanish speakers involved."

Program Changes in Response to Parent Feedback

Parent feedback from the 2024 event led to 2 changes in the 2025 program: (1) part of the lecture-based parent curriculum was replaced with hands-on participation, in which parents completed one of the same experiments their children performed. One respondent commented on this change ("Allowing parents to do one of the experiments this year was impactful on so many levels"); and (2) event logistics such as registration and group transitions were streamlined.

Discussion

Principal Findings

This study aimed to describe parental satisfaction with ROTY and respondents' postevent perceptions of health care career attainability for their children. Three findings stand out. First, parental satisfaction was very high: all 73 respondents would recommend the program, and 54 (74.0%) rated it as very interesting. Second, nearly all participants (n=72, 98.6%) reported intending to continue discussing topics from the event at home. Third, 71.2% (n=52) of respondents reported that a health care career seemed more attainable for their children after the program.

Comparison With Prior Work

Holden et al [6] investigated how students, parents, and educators view health care careers for urban youth. Using qualitative focus groups, they found that parents clearly recognized the benefits of these paths. However, parents also identified significant barriers to entry. Chief among these were a lack of exposure to medical role models and inadequate access to preparatory resources [6]. Their study emphasized that while parents want to support their children's aspirations, they often lack the tangible tools to do so. These results align with our findings regarding parental motivation; specifically, 95.9% (70/73) of ROTY respondents rated parental involvement as "important" or "very important." This high rating supports the assertion by Holden et al [6] that parents possess a strong desire to be involved in their children's career trajectories. This reinforces the value of programs that explicitly empower them with the tools to do so.

Jenkins et al [4] conducted a systematic review of over 60 years of literature evaluating the effects of health care outreach programs on historically marginalized youth. They found that most program evaluations suffer from methodological weaknesses, including an overreliance on quantitative metrics without supplementing them with qualitative insights, low response rates, and designs that cannot demonstrate measurable shifts in participant trajectories. Our study addresses one of the gaps identified by Jenkins et al [4] by pairing quantitative satisfaction and perception data with qualitative thematic feedback from the same respondents. It shares, however, the central design limitation their review describes: as a postevent survey without a baseline, it cannot demonstrate a shift in parental attitudes. What it contributes is a description of how parents perceive and evaluate a dual-generation program, which most published evaluations (focused on student participants alone) do not capture. The qualitative data highlight this distinction considering that parents specifically valued programming addressed to them, which student-only pipeline programs by design do not provide.

Implications for Practice

The findings of this study have implications for the design of health care pathway programs. Historically, many diversity initiatives have focused almost exclusively on student engagement, treating parental involvement as a secondary benefit rather than a primary programmatic objective. Our results show that respondents attending a dual-generation program valued the parent-directed programming, reported near-universal intentions to continue discussing topics from the event at home, and rated parental involvement in science education as very important. For program directors considering dual-generation models, the ROTY experience suggests practical design lessons, specifically parallel parent sessions with hands-on components, visible diversity among facilitators, language access services, and clear pre-event communication. Whether dual-generation models produce greater downstream effects than student-only models is an empirical question that requires comparative, longitudinal evaluation, and our data support the participant-reported acceptability of the approach rather than its superiority.

Limitations

This study has limitations. First, the cross-sectional, postevent-only design lacks baseline and longitudinal data, so no result in this study demonstrates change in parental attitudes or persistence of perceptions over time; all findings were postevent descriptions. Second, the sample was self-selected and educationally skewed: 64.4% (47/73) of respondents held a bachelor's degree or higher compared with approximately 38% of adults in the United States aged 25 years and older [15], and 58.3% (42/72) had studied science at the undergraduate level. Rather than demonstrating broad accessibility, these demographics indicate that the event, or the survey, disproportionately reached highly educated, science-oriented families and that the recruitment channels used may underreach the families with the fewest existing ties to higher education and science, technology, engineering, and mathematics, the very families that such programs most need to reach. Third, the survey did not collect race or ethnicity; only region of birth was recorded, which limits characterization of the representation of those underrepresented in medicine among respondents. Fourth, of 85 adult attendees across the 2 events, 73 (85.9%) completed the survey; although the response rate was high, nonresponse bias from the roughly 12 (14.1%) attendees who did not respond cannot be excluded. Since surveys were anonymous, repeat participation by attendees who came to both events could not be identified, so the dataset comprises 73 completed surveys rather than 73 confirmed unique individuals; in addition, the 2024 and 2025 parent programs were related but not identical, because part of the 2024 lecture-based parent curriculum

was replaced with hands-on participation in 2025, so pooled results reflect 2 program versions. Fifth, several satisfaction items used unbalanced response options (eg, 2 positive options against a single weak negative option), and responses were collected at the event itself; the uniformly high ratings, including the 100% (73/73) recommendation rate and the absence of negative attainability responses, are consistent with acquiescence and social desirability bias and should be interpreted accordingly. Finally, this evaluation focused entirely on parental perspectives; children's perceptions and longer-term outcomes were not assessed.

Conclusions

Respondents attending ROTY reported very high satisfaction and valued experiential learning, visible diversity, explicit parental programming, and language access, and most rated health care careers as seeming more attainable for their children after the event. These formative findings describe how families experience a dual-generation pathway program and provide a practical design template for programs seeking to engage the family unit. Establishing whether such programs change parental attitudes or children's trajectories will require pretest-posttest and longitudinal designs, ideally with recruitment strategies that deliberately reach families without existing ties to higher education or science, technology, engineering, and mathematics. As health care systems work to diversify the workforce, dual-generation programs such as ROTY warrant that rigorous evaluation.

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Data Availability

The datasets generated and/or analyzed during the current study are available from the corresponding author on reasonable request.

Authors' Contributions

Conceptualization: NH, QT
Data curation: AGAP, NH, QT
Formal analysis: AGAP
Investigation (data collection): AGAP, NH, QT
Supervision: RMT
Writing—original draft: AGAP, NH, QT
Writing—review and editing: NH, QT, RMT

Conflicts of Interest

None declared.

Multimedia Appendix 1

Survey instrument (18-item questionnaire).
[DOCX File (Microsoft Word File), 82 KB-Multimedia Appendix 1]

Multimedia Appendix 2

Thematic coding map (response-by-response coding of the 39 open-ended responses).
[DOCX File (Microsoft Word File), 38 KB-Multimedia Appendix 2]

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Abbreviations

MSU CHM: Michigan State University College of Human Medicine
ROTY: Reach Out To Youth
SNMA: Student National Medical Association

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