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# Community Health Workers Bridging the Gap: Connecting Medicaid Members with Providers, Managed Care, and Community-Based Organizations

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**Background:** Community Health Workers (CHWs) are key to extending health care services, especially to marginalized communities to reduce challenges related to health care access. The study objective was to qualitatively explore the comprehensive role of CHWs in bridging the gap for Medicaid managed care organization (MCO) members' access to health care providers, managed care, and community-based organizations to address health-related social needs (HRSN).

**Methods:** We conducted a retrospective thematic analysis of narratives developed by CHWs on their role and Medicaid member lives. Three CHWs were embedded in four predominantly Black neighborhoods of Pittsburgh, Pennsylvania, by an MCO for six-months (January–June 2017) to connect its members with the managed care, health care system, and HRSN. In total, 46 MCO members remained throughout the program. The CHWs developed narratives on 13% (n = 6) of MCO members as part of a quality improvement project. These documented narratives became raw data for this study.

**Results:** The age of MCO members ranged from 25 to 58 years and were Black (n = 6). The narrative had 50% of males and females. Three overarching themes in the narratives about CHWs' role were improving members' access to health care system (providers and medication), helping members with HRSN, and connecting members to managed care case management and member services.

**Conclusion:** CHWs as MCO staff embedded in communities could help improve its members' health care continuity, care coordination, and HRSN access. Our study demonstrates that CHWs are instrumental in bridging the gap between different systems for Medicaid MCO members. They play a crucial role in connecting the members to primary care providers, specialists, prescription drugs, MCO benefits, case management, and addressing their HRSN such as food, childcare, and housing. Future research should focus on program effectiveness by measuring member experience, health care utilization, health outcomes, and costs in Medicaid managed care settings.

**Keywords:** qualitative research, community health workers, Medicaid managed care organization, Medicaid members, health-related social needs, community-based organizations

## Introduction

The Patient Protection and Affordable Care Act recognizes community health workers (CHWs) as a health profession that is an essential part of public health and health care system.[1] CHWs act as a liaison between the individuals, social services, health care systems, and health plans. They assist in promoting individuals' adoption of healthy behavior and serve as advocates to promote, maintain, and improve individual and community health. They may also collect data to identify community needs and deliver preventive care services.[2,3] Hence, they are valuable members of the health care team who understand and serve the unique health care and health-related social needs (HRSN) of the communities they serve. According to the U.S. Bureau of Labor Statistics in May 2022, there are nearly 61,300 CHWs,[3] including

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community navigators, promotoras, health coaches, community health advisors, community health aids, or outreach workers,[4] with a mean annual salary of $49,900.[3] The CHW profession has garnered interest from federal, state, local government agencies, health systems, and managed care organizations (MCOs). The Biden administration, in its national strategy for the COVID-19 response and pandemic preparedness, has called for 100,000 new CHWs.[5] CHWs are key to extending health care services to marginalized communities to reduce challenges related to health care access.[6] They are the trusted allies that the health care system needs to address problems of fragmentation and health inequities.[6,7] Especially, inequities in health call for attention to health care access and HRSN, which are addressed by CHWs as they are based in communities.[7] The CHW profession presents an effective and cost-efficient strategy towards addressing health care issues and/or disparities in the community.[7]

Effectiveness of CHW led programs include reduction in emergency department (ED) visits and hospitalizations,[8,9] improvement in maternal and child health,[10] diabetes management,[11] cancer,[12] smoking cessation,[13] and health insurance enrollment.[14] The majority of CHW programs implemented are specific to certain diseases or population.[8–13] In addition, previous qualitative studies investigated the barriers and facilitators of CHW outreach and engagement,[15,16] successes and lessons learned from CHW program implementation,[17] and perspectives on COVID-19 vaccine outreach among homeless.[18] With 76.2 million individuals enrolled in Medicaid across the 50 U.S. states and District of Columbia as of February 2024[19] and of these 74% beneficiaries[20] enrolled in Medicaid managed care organization, there is a dearth of qualitative studies that report the comprehensive role of CHWs in Medicaid managed care population. The Medicaid MCOs are entities that contract with state Medicaid agencies to provide health care services to low-income individuals on a per member per month payment.[21] Their role includes delivery of health services to marginalized communities by managing cost, utilization, and quality of health services.[21]

CHWs, when embedded especially in Black communities can build trust in health care system overtime. The mistrust of the health care system not only stems from history of mistreatment but also depends on Black individuals' current experiences of discrimination in health care settings,[22] limited health literacy,[23] and communication problems from language and cultural differences.[24] Previous CHW studies on Medicaid population focused on connecting individuals and families to the health care system.[8,9,25] However, none emphasized their role in connecting these individuals and families to other systems such as the MCOs and community-based organizations (CBOs) as well. CHWs role in bridging the gap specifically in the context of Medicaid managed care minority members across payer, provider and social sector is not known. Our objective was to qualitatively explore the comprehensive role of CHWs in bridging the gap for Medicaid managed care members in terms of their access to health care providers, managed care, and CBOs for HRSN.

## Methods

A Pennsylvania-based MCO embedded three CHWs in four inner-city predominantly Black neighborhoods of Pittsburgh, Pennsylvania. The CHW program was a six-month intervention implemented from January to June 2017. We used the Donabedian Health Care Quality model[26–28] as a conceptual framework to describe CHWs' role in bridging the health services gap for Medicaid managed care members. Based on the model, we assume that improvements in structure of care such as addition of CHWs as part of care team leads to improvements in the process of care such as bridging the health services gap for Medicaid managed care members that in turn improves their health outcomes (Figure 1). The current study focuses on the structure and process measures as they relate to including CHWs in a Medicaid MCO's case management team.

### The Community Health Worker Program

During the six-month intervention, the CHWs served as a link between MCO members, the MCO, health care system, and CBOs for addressing members' HRSN. They educated members on how to access healthcare systems, established a primary care physician (PCP) as usual care source, they served as a resource linking members to the MCO and addressing HRSN such as transportation, food, childcare, jobs, and social support groups. The CHWs made in-person or virtual visits with MCO members at least once a month for six-months and the average visit time was 60 minutes. Member inclusion criteria included individuals residing in one of the four inner-city neighborhoods, who were between the ages of 18–64 years old, had ≥2 chronic conditions, ≥2 emergency department visits, or were due for their annual

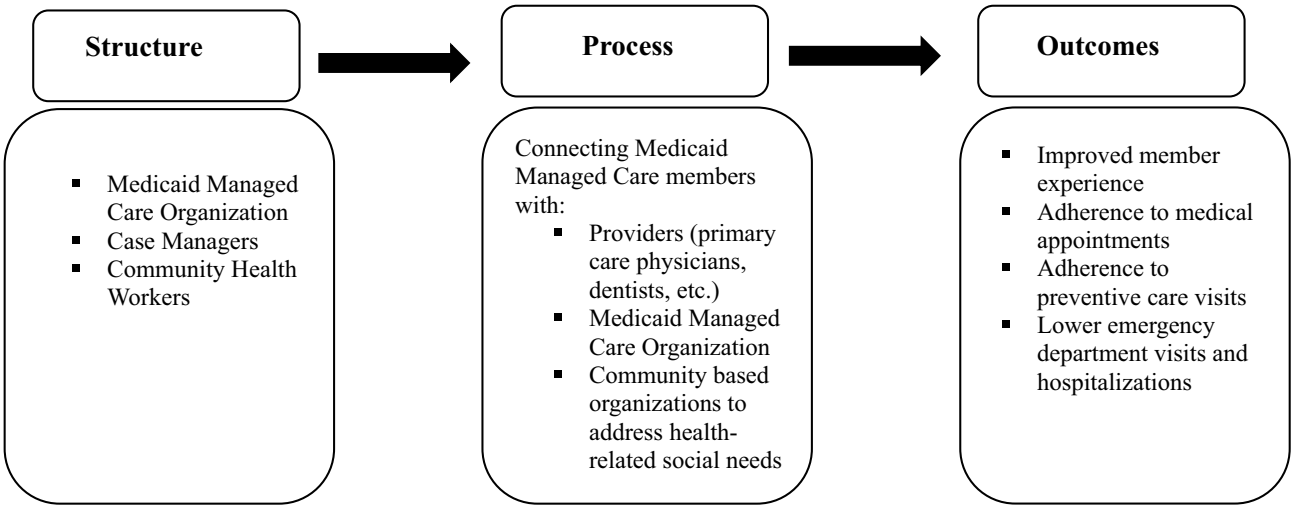


**Figure 1** Conceptual Framework: Donabedian Model of Health Care Quality.

preventive care screenings. There were about 360 members identified by the above criteria and 120 members were assigned to each CHW. Of the 360 members, the CHWs were able to reach 38.8% (n = 140) of members who agreed to participate in the program. These members were contacted by the CHWs through phone to inquire about their program participation interest. The unsuccessful calls included phone numbers that were either discontinued, busy, no answer, and no response from the member when a message was left to call back. Every identified member was reached three times. In total, about 32.8% (n = 46) of the 140 completed the six-month program.

All three CHWs were women with undergraduate degrees and had previous experience working on community health projects in inner-city neighborhoods. One of them was Black and the other two were White. The MCO provided a two-day workshop for the CHWs on their roles in the community, with the members and providers; characteristics of the population to be served, physical and behavioral health prevalence and the importance of addressing members' HRSN. They were given contacts of key MCO personnel to outreach such as care management, member services, pharmacy, and community services for questions and guidance. Data on members' health care utilization was shared with CHWs at different times during the program. They were also trained in collecting member data using health risk assessment and social needs tools. Near the end of the intervention, each of the CHWs were requested to provide two deidentified written narratives describing how they addressed the members' healthcare and HRSN. This process was to help the MCO understand the CHW role, and the socio-economic challenges faced by the Medicaid MCO members. The CHWs developed deidentified narratives on the intervention conducted on the lives of 13% (n = 6) program participants. These documented narratives became raw data for this study. Our study is a retrospective analysis of the narratives collected by the CHWs. Both CHWs and MCO members were informed about the use of deidentified narratives and data for the study purposes and publication. The Allegheny-Singer Research Institute, Institutional Review Board (FWA # 000015120) reviewed the study and provided an exempt status as it was deemed a quality improvement project (RC-6117). The researchers worked with deidentified data for this study.

## Analytic Approach

We conducted a thematic analysis to identify themes within the narratives. Thematic analysis is a research method used to identify and interpret underlying themes in a qualitative data set. We followed a systematic six-step process that included content familiarization, coding, themes generation, reviewing themes, defining and naming themes, and write up.[29] Two researchers (SA and HQ) independently coded the CHW narratives using QSR NVIVO 12. Consensus was obtained on the codes generated by the two researchers after several meetings. Codes were then placed into logical categories/themes and finally, we interpreted the derived themes to better understand the bridging role of CHWs.

# Results

## Medicaid MCO Members

Table 1 shows the characteristics of 46 members who agreed to participate in the six-month CHW program. All participants were Black with a mean age of 43 years, 78% were females, 33% were single, 27% had social security income, 23% had high school level education, 67% had ≥6 chronic health conditions, 59% were obese, and 63% self-reported their health to be fair to poor. CHWs addressed members housing (28.3%), food (17.4%), clothing (28.3%),

**Table 1** Descriptive Characteristics of Managed Care Members in a Six-Month Community Health Worker Program (N = 46)

| Variables | Measurement | Frequency (%) |
|---|---|---|
| **Sociodemographic** | | |
| Age | Mean (SD) | 42.8(13.2) |
| Gender | Female<br>Male | 36(78.3)<br>10(21.7) |
| Marital Status | Single<br>Widowed<br>Divorced<br>Married<br>Undisclosed | 33(71.7)<br>2(4.3)<br>6(13.0)<br>1(2.2)<br>4(8.7) |
| Income | None<br>Part Time<br>Cash Assistance<br>Social Security Income<br>Full Employment<br>Undisclosed | 5(10.9)<br>3(6.5)<br>3(6.5)<br>27(58.7)<br>3(6.5)<br>5(10.9) |
| Education | Grades 1–8<br>Grades 9–11<br>Grade 12 or GED<br>College 1–3 years<br>College 4 years or more<br>Undisclosed | 1(2.2)<br>7(15.2)<br>23(50.0)<br>7(15.2)<br>3(6.5)<br>5(10.9) |
| Residence | Single Family<br>Townhome<br>Apartment<br>Undisclosed | 22(47.8)<br>4(8.7)<br>17(37.0)<br>3(6.5) |
| Living Alone | No<br>Yes<br>Undisclosed | 30(65.2)<br>13(28.3)<br>3(6.5) |
| Health Conditions | 0<br>2–5<br>6–9<br>≥10 | 5(10.9)<br>10(21.7)<br>9(19.6)<br>22(47.8) |
| Body Mass Index | Underweight/Normal<br>Overweight<br>Obese<br>Undisclosed | 8(17.4)<br>8(17.4)<br>27(58.7)<br>3(6.5) |

(*Continued*)

**Table 1** (Continued).

| Variables | Measurement | Frequency (%) |
|---|---|---|
| Number of days physical health not good | Mean (SD) | 12.2(9.9) |
| Number of days mental health not good | Mean (SD) | 11.1(9.3) |
| General Health | Excellent<br>Very Good<br>Good<br>Fair<br>Poor<br>Undisclosed | 3(6.5)<br>5(10.9)<br>6(13.0)<br>21(45.7)<br>8(17.4)<br>3(6.5) |
| **Health-related social needs addressed** | | |
| Housing | Yes<br>No<br>Undisclosed | 13(28.3)<br>27 (58.7)<br>6(13.0) |
| Food | Yes<br>No<br>Undisclosed | 8(17.4)<br>33 (71.7)<br>5(10.9) |
| Clothing | Yes<br>No<br>Undisclosed | 13(28.3)<br>28(60.9)<br>5(10.9) |
| Utilities | Yes<br>No<br>Undisclosed | 5(10.9)<br>36(78.3)<br>5(10.9) |
| Transportation | Yes<br>No<br>Undisclosed | 19(41.3)<br>22(47.8)<br>5(10.9) |
| Child Care Needs Met | Yes<br>No<br>Not Applicable | 20(43.5)<br>1(2.2)<br>25(54.3) |
| Smoking/Tobacco Use | Everyday<br>Someday<br>Not a smoker<br>Undisclosed | 18(39.1)<br>4(8.7)<br>21(45.7)<br>3(6.5) |
| Alcohol use disorder | No<br>Yes<br>Undisclosed | 7(15.2)<br>2(4.3)<br>37 (80.4) |

utilities (10.9%), transportation (41.3%), childcare needs (43.5%), and helped them to address quitting tobacco/smoking behavior (39%) and alcohol use disorder (15%) by connecting them to specific CBOs.

The age of MCO members (n = 6) included in the narratives ranged from 25 to 58 years with equal distribution from both genders. The health conditions among these members included stroke, hemiplegia, lung disease "Pulmonary Langerhans", skin disease "Melasma", severe back pain, depression, arthritis, and high blood pressure. Two members were unemployed and were looking for employment.

There were three overarching themes in the CHW narratives on their role:

## Theme 1: Improving Members' Access to Health System (Providers and Medication)

### Connecting MCO Members to Healthcare Providers

The CHWs connected members to PCP. In one scenario, a member stopped receiving services from his current PCP as he was not happy with the services received and had to take a bus to get to the clinic. The CHW worked with the MCO's member services to connect the member to a PCP closer to his residence. Therefore, the member did not have to worry about transportation and could walk to the clinic. In another scenario, another member could not go to her PCP due to work schedule. The CHW assisted the member by organizing her weekly schedule and called the PCP office to schedule an appointment for her. In addition, the CHW called the member on the day of the appointment to remind her. In the third scenario, a member was due for preventive screening checkups for mammogram and pap smear. The CHW assisted the member to find an in-network obstetrics and gynecologist and scheduled appointments for her and arranged an appointment with a behavioral health therapist for her depression.

### Dental and Vision Services

A young male had previously gone to free clinic to get treatment; however, the treatment was unsuccessful. The CHW obtained information about in-network dentists from the MCO member services and helped him get mouth abscess treated by connecting the member to a dentist. Similarly, the CHW addressed a member's vision problem by arranging an appointment with an optometrist for eyeglasses. One of the members needed bifocals. Her vision benefits were not due until a few months. She was wearing dollar store glasses to read and got frequent headaches. The CHW obtained information from the MCO's member services about in-network eye care services and provided the information to the member.

### Medication

A middle-aged male member on a stroke recovery had problems getting to pharmacy to pick up his prescription medicines. The CHW outreached to his MCO case manager and helped change his pharmacy to another that could provide free home delivery and auto-refill. Another member's prescribed drug was not on MCO's formulary. Prior attempts by the provider's office to obtain MCO authorization were not successful. CHW provided educational information about the member's health condition and advised the member to talk to the provider about over-the-counter cheaper alternative.

## Theme 2: Helping Members with Health-Related Social Needs

### Uninterrupted Phone Service, Food, Clothing, and Assistive Home Devices

The CHWs had access to the MCO's community resource repository that had information on CBOs at the zip code-level that address HRSN. A member had cell phone service with sporadic connectivity. The CHW helped the member obtain a free "Safelink" smartphone with an uninterrupted phone service. Another MCO member with physical disability due to an accident did not have enough food at home. He lived in an unsafe environment and did not have warm winter clothes. The CHW accompanied his caregiver to pick up food from the local food pantry, helped with installation of grab bars in the bathroom for safety, and got a Goodwill gift card to get winter clothing for him.

### Housing, Transportation, and Employment

Another member was unable to go to the food bank to restock her groceries because she did not have transportation, and her health status prevented her from using public transportation. She owned a car; however, owed money to auto repair services so could not call them to fix the flat tire. The CHW found that an automobile workshop would fix the flat tire and remount it to the wheel for free with a coupon. The CHW took a screen shot of the coupon on member's cell phone and coached her on what to do. She was now more confident about how to take care of tire repair. One unemployed member was searching for new housing and could not afford the bus fare. The CHW connected the member with housing office and connected her with Medical Assistance Transportation Program and thus she received bus passes to her medical appointments. The CHW provided information to the member about free job training classes on culinary, nutrition, and hospitality.

### Theme 3: Connecting Members to MCOs Case Management and Member Services

The CHWs worked closely with the MCO's case management and member services. The member services helped CHWs in identifying PCP's, dentists, ophthalmologist, and other specialists in the MCO network and in proximity to members' residences. The MCO case management also provided an informational handbook on local CBOs working on housing, transportation, food, and clothing to help with members' social needs. The CHWs acted as a bridge between the members and the MCO. They helped the members connect with the case managers on their complex case management or with member services on questions regarding benefits and in-network provider contacts.

## Discussion

CHWs are health care organizations' frontline workers who extend promotive, preventive, and curative health care services in the communities they serve. Dr Brownstein at the Centers for Disease Control and Prevention mentioned that between CHWs deployment and the positive program outcomes, there is a black box that we have yet to decode.[30] Details on the nature and scope of CHW intervention and activities may assist us in understanding the roles and responsibilities leading to the positive outcomes.[30] Our study is an effort in this direction and shows the comprehensive role that CHWs play in bridging the gap in fragmented health care system, whether it is connecting with PCPs, specialists, behavioral health providers, dental or vision services for the Medicaid MCO members. They are also imperative in connecting the members to MCO for addressing their questions and concerns around health plan benefits, prescription drugs, and case management. In addition, we observed that CHWs were instrumental in addressing members' HRSN. Overall, their role across provider, payer, and social sector makes them invaluable members of managed care team. Further, CHWs embedded in Black communities through trust building can alleviate problems of access to care, high morbidity, and unmet HRSN.

One of the crucial roles played by CHWs in our narratives was connecting the MCO members with PCPs. In Medicaid managed care, the members have an opportunity to elect a PCP of their choice during enrollment, if they do not elect one within 45 days of enrollment, the member is assigned a PCP by the MCO. The member could change the assigned PCP later if they chose to do so. Medicaid MCOs assign PCPs based on factors such as proximity to members' residence, language services at the practice, and prior PCP-member relationship.[31,32] Although each Medicaid MCO member has a PCP, our narrative indicates that members were not using PCP services or did not know how to access a PCP. The reasons might be lack of knowledge about PCP availability, inability to get a timely appointment, unfriendly treatment at the PCP office, expecting referrals to diagnostics tests and specialists, and lack of time and knowledge to navigate the health care system, fear of being absent from work and wage loses. The narrative indicated that there are two types of members who have barriers to access PCPs. One who did not know or remember they had a PCP either assigned to them or they elected one during enrollment with the MCO. Second, those who were not able to schedule an appointment due to their work and life arrangements. The CHWs helped connect both these groups to PCPs. They helped the members schedule preventive care screenings, sent them reminders for the appointment, and provided education on their health conditions. In addition, they helped them find dental, vision, and behavioral health services. Similar to our study, improvement in primary care access in low-income individuals through CHW intervention is reported in a randomized clinical trial[33] and systematic review.[34] Further, the CHW assisted member with physical disability who could not go to pharmacy to get their prescription refills. Helped the member to switch to a mail order pharmacy, connected with the pharmacist and case managers who helped the member switch from the prescribed expensive drug that was not on the MCO's formulary to a generic over-the-counter drug. Without CHW assistance, those members would not have access to medication. Similar to our results, a CHW intervention in Cambodian American population observed reduced barriers to obtain medications.[35]

The MCO members in the narratives are sicker with multiple health conditions, mobility issues, and were either unemployed or under employed with many unmet HRSN. Medical care alone is insufficient for attaining better health outcomes. Medical care contributes only 10–20% of overall health outcomes for individuals. The other 80–90% of the health outcomes are determined by HRSN such as food, housing, transportation, and employment.[36] CHWs interacted

with members and their caregivers and connected them with CBOs that help with social needs such as food insecurity, housing, employment, transportation, free cell phone services, and assistive devices. The narratives indicate that CHWs act as a bridge between MCO members and CBOs by addressing their HRSN, which in turn may help in achieving better health outcomes.[37,38] Similar results were observed in a study where CHWs assessed the social needs of community members that impacted their health and identified solutions to increase access to health care services.[39]

In addition, the CHWs improved member and MCO engagement. The MCO staff such as member services and case management often find it difficult to outreach to members via phone calls. Also, members find it difficult to navigate through various MCO departments such as member services, utilization management, case management, member services, appeals and grievances. The narratives suggest that CHWs act as a catalyst in improving the member and MCO interactions by their presence in the communities. The presence of the frontline workers in the communities may help the MCO achieve higher rates of preventive screenings and better health care utilization for its enrolled members. The CHW services may improve members' experience, satisfaction with the health plan, and ultimately member retention. Our study recognizes the value of CHWs in managed care teams similar to a study on Medicaid managed care members from a western U.S. state. The study observed the provision of CHW services to high-resource consuming members improved access to preventive and social services and reduced health care utilization and cost.[40]

Our report has certain limitations. First, the narratives may include social desirability from the CHWs. They would have reported only positive experiences with the members, health plan, and providers. Second, although our narratives provide a comprehensive role of CHWs, with only a six-month intervention, we would not see all real benefits of CHW presence in the community, hence our report may have underestimated the CHW role. Third, there was only 33% CHW and member race concordance. Although all CHWs in our pilot had previously worked on community health projects in low-income neighborhoods, race non-concordance between CHW and members may have taken longer time to build trust and work on members' health care needs. Fourth, our results may not be generalizable in other contexts because our report was based on narratives from CHWs working for a single MCO in one U.S. state.

## Conclusions

Health care organizations need CHWs in the communities they serve to help members navigate through the fragmented health care system and to address the social needs in low-income neighborhoods. Our narratives indicate that CHWs are key to connecting members to MCO, providers, and CBOs for health-related social needs. CHWs as staff embedded especially in Black communities could help Medicaid MCOs improve inequities in care access, continuity, coordination, and outcomes for its enrolled members. With the growing utilization of CHWs by health care organizations, we believe our work throws light on their day-to-day activities in the community that has important implications for Medicaid MCOs, researchers, and program managers. The report provides a framework for comprehensive CHW programs. Future research should focus on CHW program effectiveness by measuring member experience, health care utilization, costs, and outcomes in Medicaid managed care settings.

## Ethics Approval and Consent to Participate

The Allegheny-Singer Research Institute, Institutional Review Board (FWA #000015120) reviewed the study and provided an exempt status as it was deemed a quality improvement project (RC-6117). Consent was obtained from both MCO members for program participation and CHWs to use the deidentified data for publication. The researchers worked with deidentified secondary data for this study.

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## Disclosure

The authors declare that they have no personal or financial conflicts of interest.

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