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Delivering Comprehensive Social Services during a Pandemic: Experience of a New York City Student-Run Free Clinic

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Abstract

Background: We describe the implementation of a remote operational model to provide targeted, multi-faceted social services during the coronavirus disease 2019 (COVID-19) pandemic at the East Harlem Health Outreach Partnership (EHHOP), a student-run, physician-supervised free clinic (SRFC) that serves uninsurable residents of East Harlem in New York City (NYC). The model attempts to mitigate the economic consequences of the pandemic while also safely meeting the needs of patients who were quarantined or otherwise medically vulnerable.
Methods: We outline a step-by-step approach required to transition social services to a remote model, across six key workflows: (1) student volunteer recruitment, (2) fundraising, (3) grocery and financial grant allocation, (4) medication delivery, (5) mask delivery and patient education, and (6) broader community engagement.
Results: Within 20 days of the first known case of COVID-19 in NYC, we established a protocol for remote care and expanded social services. From March to July 2020, EHHOP volunteers made 221 medication and 172 mask kit no-contact deliveries. To address food and housing insecurity, 140 patients were provided financial grants and an additional 109 received food deliveries. This comprehensive response was supported through emergency fundraising efforts that generated $66,690.
Conclusions: By focusing on support for basic needs including food, medication, personal protective equipment, and patient education, EHHOP was able to bolster the safety-net for marginalized patients otherwise excluded from national economic recovery efforts and ensure continuous care for patients with chronic medical illness. EHHOP's operational model for safe, remote delivery of social services provides other clinics with a framework to guide current and future emergency responses.

Introduction

The coronavirus disease 2019 (COVID-19) pandemic has exacerbated structural inequities in the United States that disproportionately impact marginalized communities, including Black; Latinx; refugee; native; undocumented; lesbian, gay, bisexual, transgender, and queer; and low socioeconomic status populations.[1] These inequities are particularly relevant in East Harlem, a neighborhood in New York City (NYC) where residents have a lower life expectancy than other

New Yorkers and are twice as likely to be hospitalized for avoidable causes, including hypertension and diabetes that can be managed with timely and effective outpatient care.[2]

East Harlem residents have contracted COVID-19 at higher rates and are more likely to die from complications of COVID-19 than individuals in neighboring communities.[3] More often, they face barriers to following the Centers for Disease Control and Prevention recommendation for social distancing due to reliance on public transportation, multi-family housing conditions, and on-site essential worker jobs.[4] Residents are also less likely to have reliable access to healthcare.[4] The East Harlem Health Outreach Partnership (EHHOP), a student-run, physician-supervised free clinic (SRFC) at the Icahn School of Medicine at Mount Sinai (ISMMS), provides free, longitudinal primary care to 200+ uninsured, predominantly Spanish-speaking East Harlem residents (Online Appendix 1). This care includes access to social services, including community resource referrals, patient education, case managers, and free or reduced-cost pharmaceuticals.

When restrictions on student-patient contact were enforced in response to COVID-19, EHHOP underwent an urgent transformation in order to maintain its operations, including social services (Table 1). Clinic leadership rapidly redesigned its delivery apparatus for existing social services, and also assessed whether new resources would be required to address the effects of COVID-19, such as recent food, job and housing insecurity. Within 20-days of the first confirmed case in NYC, a protocol for remote delivery of social services was implemented, and volunteers and funding were secured to support the clinic's significantly expanded operations.

This article presents the pandemic response at a SRFC, focusing on the transition of targeted, multi-faceted social services to remote-only provision, and offers an operational model that can be adopted.

Methods

Student Volunteer Recruitment

EHHOP's Student Recruitment Chair identified new and existing medical and graduate student volunteers to fill new roles of screening patients for financial and food security and performing contact-free medication and mask deliveries. Volunteers were solicited by sending recruitment emails to students when new volunteer opportunities became available. By partnering with the ISMMS Department of Medical Education, EHHOP incentivized student-volunteering through elective credit for third- and fourth-year students and a residency letter of recommendation for first- and second-year students.

Fundraising

The scale of need and limitations on use of existing funds required new and rapidly accessible financial support. A crowdfunding campaign was created on GoFundMe (2010-2020, GoFundMe, Redwood City, California, USA). To solicit donations, clinic leadership publicized the GoFundMe via email and social media platforms, leveraging EHHOP's extensive alumni and current student network. The initial GoFundMe fundraising goal was set at $37,200, which would offset costs of grocery deliveries and direct cash grants for patients otherwise excluded from unemployment relief through the Coronavirus Aid, Relief, and Economic Security Act.

Grocery and Financial Grant Allocation

EHHOP's Access to Care Team (ACT) identified patients experiencing heightened financial and food insecurity. Based on the initial fundraising goal, ACT aimed to provide 30 families with weekly groceries for 1 month, and 60 patients with a one-time $400 financial grant.

To identify patients who qualified for grocery deliveries, a prioritization methodology was utilized. Student-volunteers telephonically screened every EHHOP patient registered in a patient list for food insecurity, based on the 2012 United States Department of Agriculture Economic Research Service Adult Food Security Survey Module[5] (Online Appendices 2-3). Eligible patients were those who were both food insecure and unable to safely leave their homes due to active infection or high medical vulnerability to the consequences of SARS-COV-2 viral infection. When determining eligibility criteria for deliveries, we considered comorbidities and social barriers that were more likely to exacerbate the

Table 1. Comparison of EHHOP student leadership responsibilities for social service provisions pre- and during COVID-19

EHHOP Clinic Leadership Position	Role Pre-COVID-19	Role during COVID-19 response efforts
Student Recruitment Chair	Recruiting students for weekly clinic, primarily filling clinician roles	Recruiting student volunteers to staff social services roles, including food security screenings and medication delivery
Access to Care Team	Providing social services to patients in clinic, including helping patients apply for Emergency Medicaid health insurance, scheduling specialty appointments, and mitigating food insecurity	Focusing on financial grant distribution and rescheduling all non-urgent ambulatory care, as well as fulfilling responsibilities from pre-COVID-19
Pharmacy Team	Overseeing EHHOP communication with Mount Sinai pharmacy and facilitating applications for Patient Drug Assistance Programs	Running novel medication home delivery effort, as well as fulfilling existing responsibilities from pre-COVID-19
Patient Education Chair	Distributing patient newsletters with clinic updates, reminders, and additional resources	Modifying the existing newsletter to update patients on the clinic's pandemic response and educate them about COVID-19 safety and available resources
Community Engagement Chair	Overseeing outreach and engagement with East Harlem community, including with other clinics and community-based organizations	Collaborating with other clinics and community-based organizations to ensure a coordinated response to COVID-19 across East Harlem

EHHOP: East Harlem Health Outreach Partnership; COVID-19: coronavirus disease 2019

impacts of food insecurity on health and then allocated points based on consensus. Grocery deliveries were arranged in partnership with a local restaurant -- Mottley Kitchen. Each Mottley Kitchen box cost $110 per family per week, and included grocery items specifically selected for four people to maintain a healthy, balanced diet. If the patient was food insecure but able to leave their homes, patients were connected to local food pantry services and educated about contact precautions. Though patients were eligible to receive repeat deliveries, new requests were prioritized weekly.

Financial insecurity screening was performed using a custom tool developed by ACT and EHHOP social workers. The tool measured factors such as COVID-19-related unemployment, ability to pay rent/utilities, and number of children and senior citizens in the home (Online Appendix 2). Extenuating circumstances, such as homelessness and outstanding medical bills, were also taken into account. Patients with the greatest financial need were provided grants in the form of a money order sent by mail or in-person distribution by our social workers or supervising physician (in the interest of prioritizing student safety).

Medication Delivery

Medications and non-pharmaceutical supplies such as insulin syringes, alcohol pads, thermometers, and glucose monitors were delivered by student volunteers. A standardized delivery checklist was created to ensure student and patient safety (Online Appendix 4). This checklist included mandatory use of EHHOP-provided surgical masks; confirmation of patient address; coordination of delivery time; and no-contact procedures, such as leaving medications at the door and calling patients from a safe distance. Most deliveries were within walking distance of the clinic, but volunteers received ride-share reimbursement for deliveries of greater distance.

Mask Delivery and Patient Education

Mask kits were delivered to any patient living in East Harlem (zip codes 10029 and 10035), and when possible, were coordinated with medication deliveries. The medication delivery safety checklist was used to ensure student and patient safety. Kits were mailed to patients outside of East Harlem.

Table 2. Overview of pandemic response by social services teams

Social Service Team	N (%)
Volunteer Recruitment	
Program/Year of Volunteers	
MD Year 1/2	22 (51%)
MD Year 3/4	19 (44%)
Masters	1 (2%)
PhD	1 (2%)
Total Student Volunteers	43
Student Volunteers for Patient Care Tasks	
Medication Delivery	41 (95%)
Mask Delivery	22 (51%)
Fundraising and Fund Allocation	
Donors	
Individual Donors	524 (96%)
Organizations	20 (4%)
Total Donations (Individuals + Organizations)	544
Distribution of Funds	
Cash Grants, $	34,400 (52%)
Groceries, $	32,290 (48%)
Total Funds Raised, $	66,690
Pharmacy Team Deliveries	
Delivery Type	
Patient Recipients	116
Medications Deliveries	211 (95%)
Medical Supply Deliveries	10 (5%)
Total Deliveries	221

Community Engagement

The Community Engagement Chair formed new relationships with community-based organizations (CBOs) to expand capacity to support vulnerable patients. New CBOs were identified via social worker recommendation, social media, and social services websites like *FindHelp* (formerly *Aunt Bertha*).[6] Information about new resources was rapidly introduced into the clinic through communications with clinic leadership and patient-facing educational resources.

Results

Student Volunteer Recruitment

Between March and June 2020, EHHOP recruited 43 student volunteers to participate in mask, medication, and grocery deliveries. Of these volunteers, 41 (95%) delivered medications and 22 (51%) delivered masks, with one additional student delivering groceries (Table 2).

Fundraising

The GoFundMe campaign was shared on social media over 650 times. Through June 15, 2020, EHHOP received 544 total donations from 524 individuals and groups (Table 2). Donations totaled $66,690, or 179% of the initial fundraising goal. Donations ranged from $10 to $1350, and primarily came from a large number of small donors; most donations fell between $25-99 (32.4%) or $100-199 (35.1%), with few donations amounting to >$200 (18.8%) (Online Appendix 5. Additional non-financial donations, such as personal protective equipment, were also collected outside of the scope of the GoFundMe campaign.

Grocery and Financial Grant Allocation

All patients in our registry were contacted for screening; 151 patients (73%) were screened for cash grant assistance and 145 patients (70%) for food insecurity. Remaining patients were unable to be reached or declined screening. About half of the funds raised ($34,400; 52%) were distributed as $400 cash grants to 140 patients determined to have the most severe financial need during financial insecurity screening (Online Appendix 2). The remaining funds ($32,290; 48%) were used to fund grocery deliveries. In total, 109 patients were identified as food insecure, of which 33 (30%) were able to safely utilize citywide pantry food services based on self-report. Of the remaining 76 patients (70%), 30 (39%) received weekly or bi-weekly food deliveries from Mottley Kitchen using EHHOP funds, and 46 (61%) received deliveries in coordination with external organizations, including government assistance (e.g. NYC GetFood)[7] and COVID-specific community groups (e.g. Invisible Hands).[8]

Medication Deliveries

From March 20 to June 15, 2020, a total of 221 medication and supply deliveries were provided to 116 individual patients (Table 2). A total of 50 patients received multiple deliveries (Range 2-9 deliveries per patient). The remaining 66 pa-

tients received single deliveries. 169 (76%) contained medications provided by the Mount Sinai Hospital Pharmacy, while 42 (19%) had medications provided through Patient Drug Assistance Programs (PDAP). The remaining 10 (5%) deliveries contained non-pharmaceutical supplies, such as insulin syringes, alcohol pads, thermometers, and glucose monitors. An additional 15 PDAP medications, which are typically mailed to EHHOP for on-site pick-up, were re-routed directly to patient homes. A total of 3 deliveries were reported as not completed by volunteers due to the lack of a verified address, inability to reach patient, and a hospitalization during the time of delivery.

Mask Delivery and Patient Education

In April 2020, a New York State executive order[9] required New York residents to wear masks in public, so EHHOP partnered with Mask Transit,[10] an independent COVID-19 response organization, to provide mask kits for patients. Kits contained cloth masks and bilingual educational materials (Online Appendix 6), optimized for readability at a Flesch-Kincaid 6th grade level. From mid- April to July 15, 2020, 174 mask kits containing nearly 750 masks were distributed to 174 patients; among these patients, 40 specifically requested a mask delivery and 4 requested a second delivery of additional masks.

Community Engagement

Existing engagement with CBOs, such as the East Harlem Community Health Committee and the East Harlem Community Organizations Active in Disaster, was increased. Information about community resources was communicated directly through patient education materials that included: (1) a comprehensive index of local services related to food, housing, utilities, legal matters, and employment, and (2) a COVID-19 edition of EHHOP's patient education newsletter. The newsletter summarized clinic changes; explained unfamiliar telehealth terminology; educated patients about safety practices; and introduced patients to grocery, medication, and mask deliveries, as well as recommended CBO resources. CareMessage (2020, CareMessage, California, USA), a patient mass-communication technology, was used to distribute English and Spanish mobile versions of the newsletter to patients (Online Appendix 7).

Discussion

The COVID-19 pandemic has interrupted and delayed healthcare delivery for patients with chronic illness, creating challenges for clinics serving vulnerable patient populations, including SRFCs.[11] To ensure continuity of care, EHHOP enacted an emergency reorganization to respond to patients' most pressing needs quickly and effectively. Expanded social
services became an essential part of this response.

To accommodate a dramatically expanded mission, we recruited new student volunteers and offered participation incentives through the ISMMS Department of Medical Education This workforce delivered medications, masks, thermometers, groceries, and direct financial aid, which was possible due to substantial emergency fundraising. Across all initiatives, a large proportion of EHHOP patients received assistance through these emergency efforts, suggesting that the response likely prevented medication lapses, suboptimal treatment outcomes, food shortages, and housing instability for many patients. Moving forward, EHHOP's social services cannot be as extensive as they were in the spring of 2020 due to waning funds and the limitations of student academic schedules. Nonetheless, the clinic remains committed to serving our patients' complex social needs through expanded community partnerships that can fulfill the persistent needs that remain magnified during a relentless pandemic. EHHOP will continue referring patients to food services, like GetFoodNYC, and helping patients apply for rent relief programs. In select situations in which patient-mobility is a serious limitation or a patient is quarantined due to active COVID-19, efforts will still be made to deliver food, medications and needed supplies such as pulse oximeters, thermometers and oxygen tanks. The clinic also will build more community partnerships, especially ones involved in mitigating food insecurity. A recent initiative in response to the "second wave" of COVID-19 cases in the fall/winter of 2020 was to create an EHHOP rideshare account

that directly draws from EHHOP's funds. This rideshare account will permit volunteers to order cars for patients with mobility issues or vulnerability to cold weather, allowing these patients to avoid using mass transportation. The clinic plans to return to full in-person capacity once the ISMMS Medical Education Department and EHHOP's Faculty Directors deem it safe and will continue to scale up long-term remote access to services.

Challenges and Limitations

In meeting patient needs, resource allocation included difficult decisions. We sought to maximize equity in allocation by developing a standardized system of protocols to evaluate and prioritize patient needs. Other SRFCs may consider adopting these protocols with input from community stakeholders to maximize reach while minimizing redundancies in services.

Strong community partnerships greatly enhanced EHHOP's ability to provide remote social services. For example, by partnering with a local restaurant, we simultaneously supported a local business and provided groceries for food-insecure families. During future emergency responses, other SRFCs may benefit from seeking out new, as well as strengthening existing, partnerships with CBOs.

While EHHOP was able to mobilize quickly in response to COVID-19, we acknowledge that there were some limitations. First, EHHOP would have benefited from a prospective emergency response plan. The absence of an existing crisis response protocol increased the burden on clinic leadership, made errors more likely, and slowed the initial response. By systematically cataloguing our response efforts, EHHOP student leadership is now forming an adaptable toolkit to be applied to future responses. Second, grassroots crowdfunding alone was not enough to fully fund the emergency response. Limited resources signified that there were some gaps in service coverage, although steps were taken to minimize the impact of these limitations such as prioritizing limited resources for those who needed them most. Other SRFCs looking to replicate this model may achieve better outcomes if they consider: (1) proactively tracking patient circumstances, including employment status, food security, and housing access; (2) regularly maintaining a pool of emergency reserve volunteers and funding; and (3) advocating for equitable distribution of state and federal funds for social services regardless of patient's legal residency status.

This protocol serves as an adaptable framework for other SRFCs and clinics to provide social services during the COVID-19 pandemic. A comprehensive social response should be seen as mission-critical for clinics that serve the needs of vulnerable persons who are poor and otherwise isolated from access to economic and medical relief. Such efforts should encompass more than organizing personnel and raising monies to ensure that there is a longitudinal effort that stretches beyond the immediacy of the crisis. Creating partnerships within the community can augment and sustain the support of safety-nets similarly stressed to maximize response while minimizing redundancies and create emergency relief efforts that can organize more efficiently in future crises.

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Disclosures

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