Improving Migrant Health Policies and Programs: From the Normative to the Positive

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Improving Migrant Health Policies and Programs:

From the Normative to the Positive

A dissertation presented
by
Thalia Porteny
to
The Interfaculty Initiative in Health Policy

in partial fulfillment of the requirements
for the degree of
Doctor of Philosophy
in the subject of
Health Policy

Harvard University
Cambridge, Massachusetts

April 2019
Improving Migrant Health Policies and Programs:

From the Normative to the Positive

Abstract

As the population of migrants continues to grow, ensuring migrant health needs are met is a global-public health priority. This dissertation examines health policies and programs that impact migrant health to improve upon them and mitigate disparities. The focus is on Mexican citizens, immigrants in California and elderly immigrant populations in the U.S., since they represent a large share of immigrants with increasing health needs in this country and the world. To do so, I draw from an interdisciplinary approach to health policy investigation at the intersection of ethics, health services research and implementation science. I use normative, quantitative and qualitative methods to analyze these policies. The work presented shows that justifying policies and their limits, measuring the effects of a policy to inform health reform and making adaptations to interventions in order to ensure successful implementation, are important ways to improve health policies that affect immigrants in the United States.
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ACKNOWLEDGMENTS

Achieving a Ph.D at Harvard as a woman, a Mexican and a Jew seemed very unlikely not that long ago. I dedicate this work to my mother and my grandmother. They are my two pillars of constant strength, intelligence and love that give me the support and confidence to always keep going.

To my committee – Norman Daniels, PhD, Benjamin Sommers M.D. PhD, and Margarita Alegria, PhD – thank you for taking a chance on me. Being mentored by such an exemplary group of experts, each of whom has challenged me enormously, has been one of my life’s greatest honors. You have made me a better thinker and person. Norm, thank you for six years of stimulating deliberations, sound advice and instilling in me the drive to push for just health. Ben, you taught me the importance of seeing the big picture questions to guide health policy and that it is ok to always ask for help along the way. As the chair of my committee, I thank you for your continuous reassurance, interdisciplinary vision and positivity. Maggie, you are such an example of leadership and hard work. Thank you for opening your doors and teaching me the importance of diligence and perseverance.

This work would not have been possible without the funding and resources I received. I thank the Consejo Nacional de Ciencia y Tecnología (CONACYT), the Fundación para Mexicanos en Harvard, the National Institute of Mental Health, the Agency for Healthcare Research and Quality and Harvard University for the funds that made my research possible.

I am very grateful for all academic support throughout this program. To the staff in the UCLA Center for Health Policy Research, thank you for allowing me to work and learn from you. In particular, I would like to thank Ninez Ponce for her mentorship and Joe Viana for his technical guidance and friendship. I am also grateful for all the support I got from the staff in the Disparities Research Unit at Massachusetts General Hospital. Michael Reich and Martin Lajous, getting to co-design and TA the Mexico Winter Session for four years was one of my favorite experiences during my PhD. I am deeply grateful to you
for enabling me to teach. Debbie Whitney and Colleen Yout, thank you for constantly opening opportunities that matched my interests and for helping make our program wonderful.

To my mentors in Mexico, thank you Arturo Cervantes for opening up my path in public health. Eunice Rendon, I am so grateful to you for teaching me how to be grounded and search for opportunities. Merci, Armando Barriguete for teaching me how to listen. Arturo Cherbowsky, just thanks for being there.

I am lucky to be surrounded by incredible human beings. To my amiga, Erin James, thank you for everything You got me through some of the most difficult times in this academic journey and were with me to celebrate the best. Emma Sandoe, I dare say no one loves Medicaid more than you. I am so grateful for your help studying for quals and your contagious passion for this great country. Kelsey Berry, you are the best ethicist. To my hermano, Alejandro Porteny and all our beautiful Hoffman family thank you for the love and inspiration you give me. To my lifelong hermanas who are such an important part of me, I do not know what I would do without the strength of Shary Tawil, the wisdom of Alejandra Ruiz del Rio, the courage of Apolonia Torres and Sophia Stieglitz’s mentality. You are my rocks. Alicia Rosenblatt and all Rosenblatts, thank you for your example as people and making me family. Felipe Oviedo, you are my sunshine. I learn from you everyday.

I also wish to thank: my step dad Jorge Ripstein, my little sister Jaqueline Porteny, my father Carlos Porteny, Norita Miller, Claire Chaumont, Carlos Quintero, Guillermo Bobadilla, Alejandro Maza, Alberto Tawil, Tete Cherbowski, Anna Sorrentino, Fernanda Calderon, Franchesca Oliveras, Galia Alschuler, Lexie Komisar, Patty Betanzo, Paola Abril Campos, Mariana Courtney, Denise Seifert, Natalia del Rivero, Holly Dykstra, Tweedy Flanigan, Natalie Gyenes, Sarah Gordon my GHP cohort and the Peepers. ¡Gracias totales!
INTRODUCTION AND DISSERTATION OVERVIEW
INTRODUCTION

In 2017, the number of people that lived in a country other than their country of birth reached an estimated 258 million – an increase of 49% since 2000 (1). Most immigrants reside in only twenty countries (2). The U.S. is home to the largest population of international immigrants, with 19% of the world’s total (2), comprising 13.7% of this nation’s population (3). Among the foreign born in this country, half are naturalized citizens. Of those that are noncitizens, 60% are lawfully present residents (LPRs) or “green-card holders” and the remaining 40% are undocumented (4).

Legal status is an important determinant of health insurance coverage in this nation and factors into federal assistance eligibility (5, 6). In 2013, the U.S. enacted the Affordable Care Act (ACA), increasing Medicaid coverage eligibility, among other benefits. More than 30 states have expanded Medicaid, which is available to Legal Permanent Residents (LPRs) who meet income criteria and have been legal residents for at least 5 years. LPRs also gained advanced premium tax credits (APTCs) for Marketplace coverage, which did not include a waiting period for LPRs (5). Meanwhile, unauthorized immigrants are ineligible for full Medicaid benefits, APTCs, Marketplace coverage even without a subsidy, or any other federal assistance to obtaining coverage, other than emergency Medicaid. Emergency Medicaid, however, is limited to life-threatening conditions and labor/delivery (7). Currently, 45% of unauthorized immigrants, 23% of LPRs and 10% of citizens are uninsured (4).

Coverage restrictions hinder health care access, utilization and affordability (6, 8, 9), which is known to negatively affect health outcomes (10, 11) and propagate disparities (12, 13). For example, if a person does not have health insurance, they are not able to pay their cost of care,
leading them to delay care and eventually seek it in the emergency room or forgo treatment altogether (14). Aside from coverage restrictions that can be based on legal status, many migrants face prevailing barriers to access health care internationally and in the U.S. (15, 16). Such barriers include: language, lower socio-economic status, discrimination, fear, location and awareness about health services, among others (17-20).

Under the Trump administration proposed policy changes provide an unknown future for millions. Evidence suggest that the enhanced immigration enforcement and restricting immigration are leading to increased fears in some immigrant communities (4). This raises concerns over chilling effects on health care since it reduces unauthorized immigrants’ willingness to obtain care (14, 21). Further, the newly proposed ‘public charge’ rule states that a person’s use of public benefits, such as Medicaid, may affect individuals’ authorization to migrate to the U.S. or adjust their legal status to be LPRs (4). The proposed rule would likely lead to confusion and fear about the use of public programs, decreasing their utilization by those that need them (4). Consequently, disparities could widen in the near future unless policies that impact migrant health are improved.

**Structure and Overview**

This dissertation examines health policies that impact migrant health to improve upon them and mitigate disparities. The focus is on Mexican citizens, immigrants in California and elderly immigrant populations in the U.S., since they represent a large share of immigrants with growing health needs in this country and the world. To do so, I draw from an interdisciplinary approach to health policy investigation at the intersection of ethics, health services research and implementation science. I use normative, quantitative and qualitative methods to analyze these policies.
The largest current “bilateral corridor,” or migratory movement between pairs of countries is between Mexico and the U.S. (1). The U.S. hosts about 97.2% of Mexican migrants living abroad or about 11.8 million Mexicans (22). To protect the health of its citizens abroad, the Mexican government’s main migrant health policy is its Migrant Health Program called Ventanillas de Salud (VDS) [Health Windows], which was instituted in 2008 (23). The purpose of the VDS is to, “guarantee access to health services and protect the health of immigrants through binational actions in their places of origin, transit and destination” (24, 25).

The Mexican Migrant Health program protects the health of its citizens abroad through disease prevention and health promotion outreach strategies in all fifty of the Mexican consulates in the U.S. Since the start of the program more than one and a half million Mexican migrants were referred to Community Health Centers, a network of 6,500 medical units in the U.S., to access basic primary care (26). People that go to the VDS are considered a high-risk group and are screened for obesity, high blood pressure and cholesterol, HIV/AIDS other sexually transmitted diseases (STIs) and tuberculosis (TB). They are also likely to be poor and face barriers in accessing health care. In 2015 for example, only 1% of people serviced in the VDS had health insurance in the United States (25).

While the Mexican government’s efforts are protecting the health of Mexican citizens abroad, this dissertation is concerned with the need to justify Mexican migrant health policies and their limits to improve the health of migrants fairly. Paper 1 of this dissertation examines guiding policy documents and published articles that imply the Mexican constitutional right to health extends beyond the border. This notion is challenged by claiming that the Mexican
constitutional right to health is infeasible beyond the Mexican border. Feasibility in this context means viable in that something that is infeasible is highly unlikely.

The main claim is that the Mexican constitutional right to health can only exist inside Mexico’s borders because a state can only feasibly control what health care people have access to inside their state and lacks the authority to control another country’s health policies. We argue that this does not rid the Mexican government of a responsibility to protect the health of citizens abroad with the resources it can control. Thus, to meet the health needs of Mexican citizens abroad fairly, the VDS and related policies such as providing monetary compensation for would-be entitlements abroad require justifications and limits. Instituting a fair and deliberative priority setting process is recommended as a step that adds legitimacy to the Mexican Migrant Health program and related policies.

Considering Mexico’s recent 2018 elections, there is an opportunity to improve upon existing policies as a new administration enters office. By developing an account of what the Mexican government can and should commit itself to in terms of healthcare for citizens abroad, this paper provides an argument for a revision of the Migrant Health Program and provides proposals about the revision that will help meet the health needs of citizens abroad fairly. This paper can be used by policymakers and practitioners to justify the need to improve Mexico’s Migrant Health Program. Although this dissertation focuses on immigrants in the U.S., the work has bearing for all Mexican citizens living abroad, regardless of where they are and other countries.
Paper 2: Immigrants and the Affordable Care Act: Changes in Coverage and Access to Care by Documentation Status

While paper 1 of this dissertation highlights the need to justify limits in migrant health policies that may be committing to too much, paper 2 examines the effect of restricting coverage based on legal status. We focus on measuring the ACA-related changes in coverage and access by documentation status in California, the state with the largest foreign-born population. In California, one in every four people is an immigrant, which is twice the average of other state (27).

Even though most states expanded Medicaid in 2014, some states including California used a federal Medicaid waiver and expanded in some counties as early as July 2011 (28). California has instituted state and county level policies to cover some of the populations excluded from the ACA. Deferred Action Children Arrivals (DACA) designees are eligible for full-scope Medicaid funded by the state, and since 2016 the state covers all qualified children ages 0-18 in Medicaid, regardless of documentation status (14). The Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA), signed in 1996, imposed a 5-year waiting period for Medicaid on LPRs (29). California did not include this policy and continued to use state funds to cover benefits for LPRs without a waiting period (30).

The early expansion increased coverage among both citizens and non-citizens, though previous research is limited in distinguishing between LPRs and unauthorized immigrants (31, 32). Further, evidence suggests that the ACA helped reduce disparities between lawfully present immigrants and within racial/ethnic groups such as Latinos (12, 13, 32). Yet, little is known about the effects of this restriction on the entire undocumented population (5) or in California
(14, 32, 33). This is partly because the relationship between legal status, coverage, and access to healthcare has been difficult to study due to absence of data availability for ascertaining legal status in the U.S. population (34).

Paper 2 contributes to this gap by adding important new evidence on ACA-related effects on immigrants of different legal status. Our objective was to compare changes in health coverage, access to care, and utilization for immigrants in California before and after implementation of the ACA. The sample is drawn from the California Health Interview Survey (CHIS), a unique state-wide representative survey that allows us to examine subgroups based on legal status. We use data from 2003-2016, which includes the “Pre-ACA” (2003-2010), “Early ACA” (2011-2013) and “Full ACA” (2014-2016) implementation period.

We find that the ACA has led to major gains in coverage for lawful permanent residents in California, similar in scope to changes among citizens. However, unauthorized immigrants have experienced only modest increases in coverage, with the result that the disparity in uninsured rates for this group relative to citizens and permanent residents has widened considerably since 2014. We find a significant increase in having a usual source of care across all groups, but without a significant change in disparities for this outcome.

Our results indicate that legal immigrants – particularly permanent residents – appeared to have benefited substantially from the ACA’s coverage expansion in California, resulting in a narrowing of coverage disparities compared to U.S. citizens. However, safety net organizations caring for large numbers of unauthorized immigrants may not have benefited as much from the ACA coverage expansion, and issues remain about changes in funding streams for these organizations such as Disproportionate Share Hospital payments and Federally-Qualified Health
Center grants (14). Given recent concerns over chilling effects in health care from immigration enforcement reducing unauthorized immigrants’ willingness to obtain care (14, 21), these disparities could widen soon in the absence of any comprehensive immigration reform.

Meanwhile, Californian Governor Gavin Newsom’s agenda on health coverage is to include all Californians regardless of their legal status, starting by extending the Health for All Kids program from 19 to 26 years of age (35). Our results have important implications for Governor Newsom’s agenda. As California considers further efforts at the state and county level to reduce disparities in Medicaid between unauthorized and citizens, our findings can be utilized by stakeholders to provide important data for those discussions. We show that the ACA led to substantial gains in coverage for LPRs but there is important work ahead if equity in coverage is to be achieved.

**Paper 3: Adaptations to Implement the Positive Minds-Strong Bodies Intervention for Minority Elders in Community Agencies**

Paper 3 focuses on improving the implementation of an intervention that targets the mental health and physical functioning of elderly minorities, many of whom are immigrants. The number of migrants 65 and above who typically left their country of origin decades before retirement, is also increasing (36). In 2017, older migrants comprised 30 million or 11.7% of the world’s migrant population. This number grew by 11 million in developed regions from 1990-2017 (2). The United States is no exception. By 2035, older adults are expected to outnumber children for the first time in U.S. history (37). In this country, the rate of foreign born elderly is steadily increasing, representing 13.8% of people who are over 60 years of age (2).

At older ages, migrants tend to have lower self rated health, physical functioning, as well as being at a higher risk of disability and depression in comparison to non-migrants (16, 38-40).
Elevated symptoms of depression (41-43), anxiety (39, 44) and physical disability (45, 46) and dementia (47) are common in elders, especially in minority elders, such as elderly migrants (40). However, there are barriers to accessing services because of the lack of providers who can service linguistic minorities; ineligibility of insurance coverage; transportation difficulties; and limited knowledge of where to go (48). When these conditions are untreated, they lead to substantial incapacity and increased risk of disability (41, 49, 50).

Community Based Organizations are considered vital channels for eliminating disparities by enabling community participation in the health system (51). These agencies are quickly becoming important providers of evidence-based intervention programs (EBI) for mental health and other prevention initiatives related to substance use (52), sexually transmitted diseases (53) and teen pregnancy (54), among others (55-57). Importantly, they offer an accessible platform for extending the reach and impact of EBIs for diverse populations, including elderly minorities. Nonetheless, funding in many CBOs is weak, and organizational barriers can hinder successful implementations of EBIs (57).

In responding to these financial and structural barriers, CBOs must make adaptations, or changes to programs to facilitate their transition from the research stage to “real world” settings (58). However, adaptations that facilitate implementation of EBIs in CBOs are seldomly studied (57, 58). Knowledge is limited since data collection concludes when the grant or program funding stops (59). The chronic funding gap and staff shortages (57) also prevent data collection to further our understanding on how EBIs are implemented by CBOs (60, 61).

The present study addresses this gap by examining staff’s perspectives of an EBI in a clinical trial stage, Positive Minds – Strong Bodies (PM-SB), that targets mental and physical
disability in elderly minorities. PM-SB is currently implemented in different Community Based Organizations (CBOs) in Massachusetts, New York, Florida, and Puerto Rico for elders 60 and over who present with elevated mood disorder symptoms and deterioration in their mobility. Like most cases, these CBOs are understaffed and underfunded. The fact that the PM-SB is in the clinical trial stage presents a unique opportunity to investigate factors that will facilitate its transition from research to a scalable program for elderly minorities in CBOs. We address two main questions: What are staff perceptions, barriers and facilitators in offering PM-SB in CBOs? What recommendations should staff have to ensure long term adoption of PM-SB by CBOs in the future?

A survey with 30 CBO staff, 4 focus groups, and 20 in-depth interviews to examine PM-SB staff perspectives about the intervention, and factors that need to be addressed to facilitate adoption of the intervention. Our results indicate participants identified better payment and levels of workload as factors that can foster motivation, self-efficacy and retain staff to provide the intervention. Capacity building strategies such as identifying committed staff who can provide a ‘train the trainer,’ model, whereby they are taught to train other staff and adapting training tools appeared as a priority to ensure adoption of the intervention. Adapting the intervention to include strategies that can overcome financial obstacles also emerged as a recommendation.

Our work suggests that staff that presented the Positive Minds – Strong Bodies PM-SB offer important insights on how to adapt the intervention for implementation. Including the perceptions of staff that provide EBIs in CBOs can facilitate the transition from a research trial to a scalable implementation. Findings will be used to inform the PM-SB implementation specifically, and it will be utilized to improve EBI implementation in CBOs, more broadly.
CONCLUDING REMARKS

This dissertation uses an interdisciplinary approach to examine policies that affect the health of a large segment of the immigrant population in the U.S. Namely, this work shows that although migrant health policies and programs are advancing in meeting the health needs of Mexican citizens, immigrants in California and the elderly, more needs to be done. In paper 1 we argue that more can and should be done for Mexican citizens abroad by justifying the Mexican government’s migrant health policies and their limits. Paper 2 indicates that the ACA led to important gains in coverage for LPRs, but further state and county efforts are required to achieve Governor Newsom’s agenda. And finally, nuanced interventions to improve the mental health and physical functioning of elderly immigrants are proving to be effective in CBOs. Yet, adaptations are needed to ensure interventions are successful as they move from a clinical trial to a scalable implementation.

Indeed, as the population of migrants continues to grow, ensuring this population’s health needs are met is a global-public health priority. This dissertation shows that justifying policies and their limits, measuring the effects of a policy to inform health reform and making adaptations to interventions to ensure successful implementation, are important ways to improve migrant health policies in the United States. The work presented can be used by policy makers and practitioners both within the U.S. and in other countries like Mexico.
PAPER 1: THE LIMITS OF THE RIGHT TO HEALTH OF MEXICAN CITIZENS ABROAD

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ABSTRACT

Does a constitutional right to health protection extend beyond the state’s borders? Does a state have a responsibility to protect its citizens’ health when they are abroad? Through an account that focuses on the feasibility of Mexican migrant health policies, we first present examples from guiding policy documents and published articles that imply the Mexican constitutional right to health extends beyond the border. We challenge this claim by arguing that a constitutional right to health can only exist inside Mexico’s borders because a state can only feasibly control what health people have access to inside their nation and lacks the authority to control another country’s health policies. This does not mean the state does not have duties to its citizens abroad regarding to health but rather that the Mexican government has a responsibility to reduce the risk of citizen’s impoverishment due to medical need with the resources it can feasibly control. The Mexican government recognizes this responsibility through its Migrant Health Program. This program along with related policies, like providing monetary compensation for services abroad, require justifications and limits. We recommend instituting a fair and deliberative priority setting process as a step that adds legitimacy to the Mexican Migrant Health Program and related policies. Although we focus on Mexican migrant health policies, the analysis and recommendations extrapolate to migrant programs in other countries.
INTRODUCTION

Does a constitutional right to health protection extend beyond the state’s borders? Does a state have a responsibility to protect its citizens’ health when they are abroad? The most straightforward argument for a state responsibility to protect the health of Mexican citizens abroad might seem to come through the Mexican constitutional right to health. This claim implies that the Mexican government has responsibilities to guarantee access and quality of care wherever its citizens are. The claim is “highly unlikely” since it can only come about through bilateral agreements with all countries having Mexican migrants, which is questionable in a world of sovereign countries. Our main claim is that the duty to protect the health\(^1\) of Mexican citizens abroad, whether they live abroad or are traveling, is separate from the constitutional right to health in Mexico. The Mexican government cannot control access or quality of care abroad. The duty to protect the health of Mexican citizens abroad, therefore, requires its own legitimate policies with justifiable limits on what the Mexican government can reasonably provide. We focus on Mexico because it is a country with a large population of citizens living abroad, especially in the United States.\(^2\) Another important reason is that the Mexican government may already be committing itself to migrant health policies that it cannot guarantee. This raises concerns about how health needs of Mexican citizens abroad can be met fairly.\(^3\)

---

\(^1\) There are distinctions between health, health care and health coverage. Although a broad discussion exists for each of these concepts, for the purposes of seeking to answer what justice requires with regards to resource allocation questions such as the one we posit, we take on the following definitions. We define health to be the state of normal functioning that allows people to participate in the range of opportunities open to them (62). Health care’s main function is to protect normal functioning and it includes health care services, preventative services and environmental measures, among others (65). Health coverage (as interpreted in the Universal Health Coverage literature) is defined as ensuring that all people have access to needed promotive, preventive, curative rehabilitative and palliative services while also ensuring that the use of these services does not expose the user the financial hardship (63).

\(^2\) There are around 11.8 million Mexican citizens living abroad, 97.2% of these live in the United States (22).

\(^3\) To meet health needs fairly we must also address the socially controllable factors that impact health beyond health care. For example, income inequality leads to bad health as does a contaminated environment (65).
In what follows, we first explain why our line of reasoning is based on the feasibility of Mexican migrant health policies rather than on theoretical principles of a right to health protection. We then present sections of the Mexican Migrant Health Program’s guiding document and examples from articles authored by the heads of the Program as sources that imply the Mexican constitutional right to health extends to citizens abroad. In the next section, we provide examples to show Mexico cannot feasibly control access or quality of care to its citizens abroad. We conclude that rights which depend on this capacity cannot translate into entitlements outside the state. We then argue that, despite reasonable disagreements, the lack of authority to control health policies abroad does not rid the Mexican state of responsibilities to reduce the risk of citizen impoverishment due to medical need. This duty can be realized with the resources the Mexican government can feasibly control. The Mexican government recognizes this responsibility through the Migrant Health Program.

After contending that a duty to protect the right to health for Mexican citizens abroad is separate from the Mexican constitutional right to health, we recommend instituting a fair and deliberative priority setting process to add legitimacy to resource allocation decisions that can reasonably protect the health of Mexican citizens abroad. We present monetary compensation for health services of would-be entitlements in Mexico for all Mexicans abroad as examples of policies which the Mexican government could allot resources to. We argue that compensation for transportation back to Mexico to access care is not feasible because it falls outside state obligations and are economically unjustifiable. In contrast, providing monetary compensation could feasibly become part of the duty of the Mexican state to protect the health of its citizens abroad but requires limits to meet needs fairly.
A FOCUS ON FEASIBILITY

Our argument is about whether the Mexican government has a duty to protect its citizens abroad, which is different from what a state owes to non-citizens inside their own borders. There are numerous accounts that question whether states have a duty to provide the right to health of immigrants inside their borders and why. These accounts vary. For example, some interpretations of the human-rights approach argue that it is a responsibility to provide the right to health of immigrants within a state’s borders because they are human (64-66). Daniels and Ladin (2014) on the other hand, view most immigrants as contributing members of society. They argue that as a matter of justice, reciprocity from the society where they are contributing members of requires their opportunities to be protected, including those that would be affected by not having access to health (67). Still, others hold that a state does not owe rights to non-citizens (68). Under this view, a state only has an obligation to protect the right of its citizens as citizens of a country, so the state does not have an obligation to protect the right to health of non-citizens (68).

What a state owes its own Mexican citizens abroad, because they are citizens, must be distinguished from the right to health in Mexico. In Mexico the constitution recognizes health as a human right⁴ that meets the feasibility criterion because it is progressively realizable.⁵ The Mexican government guarantees health protection through a comprehensive range of key

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⁴ At an international level, Mexico is a signatory of the International Covenant on Economic Social and Cultural Rights (ICESCR), which includes the right to health in its General Comment 14 and requires the application of the pro homine principle, whereby all laws in the Constitution need to be interpreted in a way that benefits all individuals, regardless of their legal status (70). Although the Mexican government presents what entitlements and limits it can provide under the General Health Law, the law is about Mexicans in Mexico. Thus, even though the Constitution recognizes health to be a human right, the policies that would enact the right, such as providing access to entitlements, for all people, regardless of their legal status in Mexico, are not implemented or modified. As it stands, migrants in Mexico that are unauthorized receive equal entitlements to Mexican citizens for three months. Migrants that are unauthorized lose these entitlements after three months (69).

⁵ In the 2003 Mexican health reform, the overarching goal was to provide Universal Health Coverage (UHC) to the entire population through these entitlements.
services that are consistent with other social goals (66). These services are entitlements that constitute a right to health.

Yet, the right of all Mexican citizens abroad is not a human right, or it would not matter if one is a Mexican citizen or not, only if someone is human. Mexico cannot provide entitlements to all humans outside the border. Such a commitment is not economically feasible: it would strain the entire government’s budget and opportunity costs to the Mexican population would become exceedingly high.

The focus of our account is on feasibility, understood to be what the Mexican government can viably do to protect the health of its citizens abroad fairly and not on the theoretical principle of what a right requires. What we mean by “infeasibility” is that something is not likely due to foreseeable circumstances, but it does not mean that it is impossible. Some theories advocate that there needs to be a duty bearer for a right to be realized (70). Our focus is not based on such a theoretical claim about the requirement of a state to be the bearer of a right. Rather, we provide an account about what the state – in this case, the Mexican government - can do to protect the health of its citizens abroad.

THE DUTY TO PROTECT THE HEALTH OF CITIZENS ABROAD

The internal bylaws of the Ministry of Health establish that the International Relations Department is responsible for improving the health of fellow citizens abroad through the Migrant Health Program. The Mexican government, through its Mexican Migrant Health Program called Ventanillas de Salud (VDS) [Health Windows], establishes promoting and protecting the health of citizens abroad as a responsibility of the state (Appendix 1.1). The program was institutionalized in 2008 with an annual budget of 2.5 million dollars. According to the guiding

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6 An opportunity cost is what must be foregone to acquire or achieve something else.
documents of the Mexican Migrant Health Program, the *VDS* has the purpose of “guarantee[ing] access to health services and protect[ing] the health of immigrants through binational actions in their places of origin, transit and destination,” (24, 25) (Appendix 1.1). The program mostly takes the form of disease prevention and health promotion outreach strategies.\(^7\)

The heads of the Migrant Health Program that implement the VDS interpret their responsibility placed by the Mexican government to protect the health of citizens abroad as part of the constitutional right to health. One recent peer-reviewed article authored by the head of the VDS program and her collaborators claim that the VDS has “the purpose of guaranteeing [Mexican citizen’s] constitutional right to health, regardless of the territory where they live” (23). We challenge this claim and argue that the Mexican government cannot “guarantee” a right to health abroad: it can at best improve the health of citizens abroad but cannot guarantee access to care because it lacks the authority to provide those benefits abroad.

Another article by the Director of the International Relations Department of the Ministry of Health states that the Mexican Migrant Health Program “is based on different legal norms such as the Mexican Constitution, international treaties signed by Mexico, the General Law on Health, the Law on Migration, the Ministry of Health’s Internal Regulations and the 2013-2018 National

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\(^7\) The VDS are information centers found in all fifty of the Mexican consulates in the United States. Additionally, the VDS have an outreach strategy consisting of mobile information stands that travel to remote agricultural and industrial areas where there is a large population of Mexican migrants. The VDS provide on-site health education on prevention, basic health services such as screenings. (26). Although VDS are not found in treatment centers they do provide low cost referrals to Community Health Centers, a network of 6,500 medical units in the United States (28). Screenings include: obesity, high glucose and high blood pressure, cholesterol, HIV/AIDS, Tuberculosis and other sexually transmitted diseases (27). Another key feature of the program is information dissemination about entitlements that Mexicans have a right to in Mexico. People also receive forms of primary care including vaccination for seasonal influenza.

Since 2000, the program has referred more than 1,500,000 Mexican migrants to community centers where people can access basic primary care. In 2015, 2,453,139 people went to the VDS. Among these, 1,462,166 received diagnostic testing for chronic and infectious diseases as well as information associated with risk factors for the diseases. In the same year 63,084 people were vaccinated, 299,806 were referred to a service in the U.S. (27) People that go to the VDS are considered a high-risk group for obesity, high blood pressure and cholesterol, HIV/AIDS other STIs and TB, they are also likely to be poor and face barriers in accessing health care. In 2015 for example, only 1% of people serviced in the VDS had health insurance in the United States (71).
Development Plan. The [Migrant Health Program] is part of the national goal of building an inclusive Mexico and linked to the objective of ensuring full access to health services” (71). This example implies the Mexican government has a duty to ensure full access to health services abroad, which we challenge.

**THE MEXICAN CONSTITUTIONAL RIGHT TO HEALTH ABROAD IS INFEASIBLE**

Claiming that the Mexican government can “guarantee” and “ensure full access to health services” to Mexican citizens abroad is infeasible since the government, at most, can only improve access to health. The Migrant Health Program cannot feasibly provide the entitlements that form part of the Mexican constitutional right to health. An entitlement entails the capacity to provide the service. The Mexican government does not have the capacity to provide these services abroad to anyone, whether non-Mexicans or Mexican citizens abroad, because the state cannot control what people have access to outside of Mexico. By “control” we mean that the Mexican government does not have the authority to control health policies, so then citizens cannot claim a right to do so. Some may argue that if access was assured through compensation of transportation back to Mexico then access could also be guaranteed. For this reason, we include compensation for transportation services back to Mexico in our assessment of feasibility.

The Mexican government would probably not be given the authority by another country to control their health policies; countries willingly giving up power over their own policies seems infeasible. For example, if the U.S. government allowed doctors certified in Mexico to perform surgeries in the U.S. on Mexican citizens, this would infringe upon American sovereignty to control its medical accreditation policy within its borders. This seems unlikely unless the U.S. is in a hypothetical situation where it is weakened and cannot control the professional accreditation of its medical personnel. As it stands, policies that would permit the Mexican government to control healthcare for Mexican citizens abroad lack feasibility. This does not mean it is
impossible. One could imagine a scenario in which there is an agreement between Mexico and the U.S. In this agreement, the U.S. permits Mexican doctors to service their population under restricted conditions, such as only providing preventive services.

Yet, if the Mexican government does not have the authority to feasibly control health policies abroad, then it follows that it cannot determine what services people have or should get. And so, its citizens abroad cannot claim a right that the Mexican government is constitutionally required to satisfy because the Mexican state by itself lacks the authority to deliver that care outside Mexican borders. Who gets access to services and what services are provided are at the discretion of the country in which the Mexican citizen lives. The lack of capacity to exercise authority for access to services and to determine what services are available means that the Mexican government cannot feasibly make these guarantees to citizens abroad.

If Mexico does not have the ability to control access to health care abroad, then it follows that the Mexican government cannot feasibly regulate quality of care overseas. Regulating the quality of care of another country implies that the Mexican government would need to have the authority to decide how a service is provided, overriding policies of licensing and accreditation, among others, that belong to the host country. Let’s go back to our example of what would happen if doctors certified to perform surgery in Mexico start to operate on behalf of the Mexican government on Mexican citizens in the U.S. in need of services. In the United States, all doctors must pass the United States Medical Licensing Exam to ensure, among other factors, that doctors are capacititated to practice medicine according to American quality standards (72). There are other requirements and limitations for international doctors. In the United States, practicing medicine without a license is prosecutable (72). With the current rule of law coupled with how medicine is practiced in the United States, Mexican doctors cannot legally practice medicine in
the United States. Consequently, they cannot feasibly practice medicine on the Mexican population in the US without going through licensing and institutional requirements, so quality of care that is ensured through providing a service is not controlled by the Mexican government and cannot be guaranteed.

One of the widely-held purposes of right-to-health legislation is to prevent patients from incurring in catastrophic expenditures due to entitlements in health care. Guaranteeing economic protection is a necessary condition for having such a right (73). The Mexican government is not able to prevent a catastrophic expenditure outside of Mexico because it cannot control the costs of services outside the country. How much a person is charged for a service in other countries will depend on how the health system is designed in that state. The Mexican health system has no authority to infringe on these decisions and therefore cannot feasibly control how much people pay for services outside of that nation. In the United States, for example, insurance companies, providers such as hospitals, and physicians can be involved in setting the price of care. People may be charged differently for the same intervention in the same place for reasons such as being covered by different insurance companies, among others. Therefore, preventing catastrophic expenditure from the supply side by influencing the multiple stakeholders that set prices in host countries seems unrealistic. Mexico consequently lacks the authority to determine the responsibility that another state has in providing Mexican health entitlements and what entitlements to provide to people in another country.

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8 It is worth noting that US doctors often cannot control what patients in the US are charged. Costs are many a times set between providers and insurance companies. In some states, such as Maryland, prices are regulated by the state.

9 Making this distinction places significant weight on whether a state is a signatory to the international covenant that recognizes a right to health. However, what being a signatory to the international covenant means in terms of commitments to citizens that come from other countries is not defined. Some may say that global courts could articulate what being a signatory to the international covenant of the right to health requires but there is no framework for doing that for nation states.
Some may argue that even though the government can provide resources to protect the health of citizens abroad, that it should not, because a government is only responsible for the health protection of its citizens inside the border. However, countries have embassies and consulates to protect their citizens abroad, which suggests that countries still have a responsibility to their citizens outside of the state. The Mexican government, for example, has a particularly strong foreign service, especially in the United States, with 50 consulates in 25 states inside the country, making it the country with the highest number of consulates in another country (23). We argue that the Mexican government can and should commit itself to policies that it can feasibly control, such as the VDS. We recommend including a fair and deliberative process to justify such policies as well as their limits. In doing so, legitimacy is added to resource allocation decisions.

**Legitimate Policies for Citizens Abroad**

To understand what counts as a legitimate policy for health and how limits for health care should legitimately be established, we appeal to the notion of a fair and deliberative priority setting process. Per this view, all countries have reasonable resource constraints regarding their health budget. What to include in a program that provides a reasonable array of services should be decided through a fair and deliberative priority setting process to progressively realize a right to health (74).

The priority setting process helps decision makers make critical choices when deciding which services to expand first, whom to include first, and who should pay for how much of the service. These are all important questions when a country, such as Mexico, interprets the right to health to be progressively realizable (75). Progressively realization means that the comprehensive range of key services that are guaranteed entitlements gradually expand as resources permit with the purpose of meeting social goals (73).
A legitimate fair and deliberative priority setting process must meet a set of criteria (76). The process must be transparent. The decisions and their reasons should be made public, and the public, through participation, should have ample opportunity to influence the outcomes of the process. There should also be a robust system of monitoring and evaluation of policies with opportunities for their revision and improvement (62). People who participate in a fair and deliberative priority setting process should represent the interests of the population the policy is designed for. The process is designed to bring public accountability and acceptability to the goals of a policy and its opportunity costs (77).

Although the focus of our argument is on Mexican citizens abroad, highlighting the need for a fair and deliberative process in Mexico is essential. This will ensure that the resources for treating citizens abroad that come from Mexico’s health budget, such as the VDS, are legitimate and have justifiable opportunity costs overall, making them what justice requires (62). Without a fair and deliberative priority setting process for the health budget, we cannot assume this is the case.

Mexican leaders have previously called for a fair and deliberative process to be used in health care resource allocation. Former Secretary of Health, Mercedes Juan made such a claim during the 12th World Congress on Bioethics in 2014 (78). Still, Mexico has not institutionalized a fair

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10 Various groups from different disciplines can participate, for example: policymakers, health professionals, academics, patient groups, and civil society organizations. The participation of these stakeholders meets the requirements of justice. They can offer an accurate perspective of the group they are representing so that various concerns can be deliberated and consensus about a fair distribution can be reached. Because stakeholders must not always act in the best interest of the population, who participates in this process should also be deliberated.

11 To allocate resources in a way that that meets health needs fairly, inclusion of criteria is suggested to facilitate deliberations that deal with concerns about distribution and who to prioritize while in the process of service selection. There are multiple strategies to conduct priority setting for service selection. The ethical approach that the WHO supports in the report, “Making Fair choices on the Path towards Universal Health Coverage,” is to create priority classes of services with cost-effectiveness thresholds which are linked to the countries budget. Services that are deemed cost-effective, target the sickest, poorest and those at an elevated risk of societal harms and offer financial risk protection are high priority while others should be balanced more carefully (77).
and deliberative priority setting process. There have not been any documented efforts, that the authors know of, since 2007 (79). This is not because the approach is infeasible. Several other countries, however, include conditions for a priority setting process that are aligned to Accountability for Reasonableness criteria to guide resource allocation, such as: Norway (81), South Korea (82), Indonesia (83), Netherlands (84), Taiwan (85). Tanzania and other countries are also taking important steps to implement such a process at a district level (86). Our aim is not to go as far as to say that policies without a fair and deliberative priority setting process are unacceptable. Rather, we recommend instituting such a process to add legitimacy to resource allocation decisions that can reasonably protect the health of Mexican citizens abroad.

**Feasible vs. Infeasible Compensations**

Even if Mexico cannot provide services abroad, it might have an obligation to bring its citizens home for treatment. Here, it is important to distinguish between the obligation the Mexican government has to provide access to services in Mexico and repatriation, which is not a state obligation. A right to health in Mexico does guarantee access for non-critical care. At the same time, Mexican citizens who left the country exercised their right to emigrate, which includes leaving the guarantees the Mexican government can provide to realize a right to health.

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12 After the 2003 Mexican health reform, two benefits packages were designed. The first is called the CAUSES (Catalogo Universal de Servicios Esenciales en Salud) [Universal Catalog for Essential Health Services], which covers services with relatively low cost and high incidence. The second is called the FPGC (Fondo de Proteccion Contra Gaston Catastraphicos) [Fund for Protection against Catastrophic] which is designed to cover high cost diseases that cause catastrophic expenditure is a national risk pool for catastrophic illness. Given scarce resources, the development of a fair process that considers multiple criteria was needed for the selection of conditions and interventions in the FPGC. In 2004, sixty diseases were selected as potential candidates for the FPGC. However, there were serious data limitations and some interventions remained too costly to even be considered, such as dialysis. In 2006, a decision-making process was designed using the “Accountability for Reasonableness framework,” however the process was not implemented (80).
in Mexico. As these citizens were not deprived of this right, there is no state obligation to restore these entitlements, thus, repatriation is not an obligation.\footnote{There are certainly exceptions to this non-obligation because not everyone who leaves Mexico was exercising their choice to do so.}

If Mexico did have an obligation to repatriate all Mexicans, any Mexican could claim that they should be reimbursed for their repatriation when they need any entitlement. Suppose a Mexican woman needs a pap-smear. If reimbursement for repatriation was an obligation, this person could claim reimbursement by the Mexican government to go back to Mexico to receive this routine screening. Further, claims from Mexican citizens in Mexico to get reimbursement for transportation costs could emerge on the grounds of deserving equal treatment. The costs of repatriating people that need access to an entitlement in Mexico may be too high and would be even more if Mexico had to reimburse people for transportation. The opportunity costs are, thus, probably not justifiable.\footnote{The Mexican government’s spending is of approximately 180USD per capita (87). If we assume an extremely conservative calculation of 100USD per repatriation, this amounts to more than half of the per capita spending, without accounting for any specific health benefit, such as treatment. An increase of more than 50% of per capita spending is not feasible now.}

There are other reasons why transportation services back to Mexico to realize entitlements cannot be feasibly provided. What we mean by transportation services is paying for transportation back to Mexico, which includes transportation of the critically ill. Transportation to access care is arguably not provided for all Mexicans, except if they are in an emergency. For example, the Mexican government does not provide transportation each time a person in Mexico needs to see a doctor. Yet, the government will rescue a person through its emergency medical services. One can reasonably assume that if the Mexican government does not have the capacity to provide transportation for entitlements for Mexican citizens in Mexico, it will not have it for Mexican citizens abroad. In response, one could argue that because the Mexican government
does cover transportation for emergencies, then it could pay to repatriate the critically ill since they are also facing a life-threatening emergency.

Limited resources are allocated by the Mexican government to provide administrative support for repatriating Mexican citizens under critical conditions. The documents that explain this service clearly state that the government does not provide monetary compensation, but a justification for this limit is lacking (88). Examples of critically ill citizens include a person who has suffered an accident, is in a critical chronic health condition such as having suffered a heart attack or is immunosuppressed due to HIV/AIDS. Under the current system, the consular service facilitates contact with the Ministry of Health and oversees the logistics of the repatriation with the family members of the affected individual. The service includes finding hospital beds in Mexico for the treatment of conditions covered by the Seguro Popular, a benefits package with entitlements which all people have a right to in Mexico (89). Mexico is not obligated to provide monetary support or compensation for the repatriation of the critically ill because it is not part of its legal commitments. But should it? We argue that repatriation of the critically ill for all Mexican citizens abroad is not an entitlement and should not be.15

The reasons why repatriating the critically ill is not an entitlement for all Mexicans coincide with the justification we provided for not considering transporting citizens back to Mexico as a state obligation. First, Mexicans choosing to leave the country are willingly going to a place where a right to health cannot be feasibly guaranteed by the Mexican government and so transportation, falls outside the state’s obligations of an entitlement. Additionally, committing to repatriating all critically ill Mexican citizens implies that the Mexican government would pay for all transportation costs for this population. This is infeasible because the costs of repatriation

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15 Except for people who left without a choice to stay such as children or refugees.
would substantially increase the allocated per capita amount under the *Seguro Popular*. There would also be an opportunity cost to paying for this service that falls outside state obligations, making the distribution probably unjustifiable to the rest of the population. Further, the fact that Mexico would pay for the repatriation of Mexican citizens may well be an incentive to deport citizens.

Some may argue that if a country has enough resources, they can provide repatriation of the critically ill. We are not saying that other countries should not provide this type of service. If a country goes through a deliberative priority setting process for citizens abroad and chooses to provide this service, then the opportunity costs are justifiable to its society and it should provide the service. We argue that the limit to not include repatriation under critical conditions as an entitlement for all Mexicans is permissible. The reasons for this limit are that providing the costs of repatriating all who are critically ill is not feasible or justifiable.

**Feasible Compensations**

Although the Mexican government cannot and should not pay for repatriation to realize entitlements, there are strong ethical reasons to offer some monetary compensation with the resources the Mexican government can feasibly control. For example, providing monetary compensation mitigates catastrophic expenditure due to medical need. Other reasons could reasonably include improving people’s opportunities to reach their life goals by helping them cover the costs of some medical needs. But do strong ethical reasons to provide monetary compensation make the policy an entitlement for Mexican citizens abroad? The simple answer is “no.”

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16 In an earlier footnote we noted that the Mexican government’s spending is of approximately 180USD per capita (90). We assume an extremely conservative calculation of 100USD per repatriation. The same calculation holds for this section, indicating that the cost of repatriation amounts to more than half of the per capita spending, without accounting for any specific health benefit, such as treatment. An increase of more than 50% of per capita spending is not feasible at the moment.
There is a distinction between monetary compensation and entitlements covered under the Seguro Popular. Some people may argue that the Seguro Popular is a financial mechanism by which every Mexican has a right to a specific per capita amount which, in turn, translates into entitlements accessed through the Mexican health system. Because the right to the per capita amount is based on a person being a Mexican citizen and a person is still a citizen even though they may leave the country, some may conclude that the person still has a right to the same per capita amount regardless of where they are in the world. This conclusion does not follow because a right to health is not a lump sum of money that covers health costs.

To say that a person has the right to the same per capita amount regardless of where they are in the world ignores fundamental elements of what a right to health constitutes. A right to health that is embodied through entitlements, such as that of Mexicans, includes the responsibility of the state to provide access to entitlements. Because the Mexican government cannot feasibly control whether a person in another country has access to entitlements abroad, it cannot provide the entitlements outside of Mexico, but it can still cover some of the costs of services that would-be entitlements.\textsuperscript{17} Therefore, a right to health for citizens abroad cannot be feasibly realized in the same way as the right to health for citizens who remain in the country.

Covering the cost of services that are not provided in Mexico for citizens abroad would raise the cost of care in Mexico. For example, Mexico has a high burden of Chronic Kidney Disease (CKD). The Mexican government only covers peritoneal dialysis for Mexican workers that pay for part of their coverage under the Instituto Mexicano del Seguro Social (IMSS). On the other hand, the Mexican government does not cover dialysis under the Seguro Popular due to the

\textsuperscript{17} Other countries with a constitutional right to health also provide compensation to citizens abroad under certain conditions, without considering compensation an entitlement. The European Union, for example, provides citizens that are temporarily abroad (students, people away on business or travel) compensation to treatment that cannot wait until the citizen is home. However, not all services are covered and reimbursement overall can be circumstantial. People are expected to pay upfront and then claim reimbursement with their national system (91).
economic strain it would cause on the health system (92). This coverage disparity has been controversial (92). If the Mexican government would compensate some of the costs of dialysis to Mexican citizens living abroad, the opportunity cost of raising the costs of care and not covering Mexican citizens in Mexico while covering them abroad, would arguably be unjustifiable.

While an entitlement guarantees access to a service if its opportunity costs are justifiable in Mexico, monetary support from a separate fund for Mexican citizens abroad does not mean access to a service. Monetary support is instead used to subsidize treatment for a medical need, but the person affected must be able to find access to the service on his or her own. Even if a Mexican citizen abroad finds access to services included in the Seguro Popular benefits package, such as treatment for breast cancer, subsidies for that treatment do not represent an entitlement. Mexico cannot control the quality of care and cannot be held responsible for the services as they would otherwise be realized in Mexico.

We argue that compensation is not an entitlement, but there are strong ethical reasons to provide some arguably monetary compensation to Mexican citizens abroad. As such, establishing what the limit in compensation required by justice is and under what conditions can enhance the legitimacy of such policy. Cases will arise where the costs of care are higher in a host country than in Mexico so paying for the full cost of treatment would strain the health budget. In this case, the opportunity costs of paying for the full treatment would probably be unjustifiable. For example, the cost of getting treatment for a cardiac arrest is more expensive in the United States than going to the Seguro Popular in Mexico. The opportunity cost of paying for the greater cost of an equivalent surgery in the U.S. may also be unjustifiable.
Not being able to cover the full amount of a service does not justify why some other amount cannot be feasibly provided because the maximum amount of compensation does not need to be the full cost of treatment. But questions about what the actual limit in compensation is and what its distribution should be remain. Important queries could arise on whether the maximum amount of compensation should be some amount per treatment or per person. Meaning, should the amount in compensation be what would be paid for the same service in Mexico or should a person be reimbursed up to the limit that is spent per person in Mexico?

Arguments could reasonably state that the limit in compensation for Mexican citizens abroad is equivalent to the monetary amount the Seguro Popular would pay a Mexican provider for that service. The claim that justifies this limit could be that the monetary amount that the government allocates to each Mexican citizen to meet healthcare needs because they are citizens does not change regardless of where they live so the opportunity costs are feasibly justifiable. Others may argue that migrants that are the sickest, poorest and at an elevated risk of societal harms, in comparison to the society they live in the host country, should receive a higher monetary compensation than the equivalent per-capita amount that would be given to them by the Seguro Popular, if they lived in Mexico. The reason for receiving this compensation would be that they are disadvantaged and unable to pay the full amount of care.

These differing claims to define a justifiable limit call for a much-needed fair and deliberative priority setting process. Since no such process has been implemented in Mexico, the amount of compensation for would-be entitlements abroad required by justice remains unclear. Further, what a state owes citizens abroad cannot be confused with entitlements. But the policies lack an assessment of the opportunity costs foregone to meet health goals fairly. This includes
the opportunity costs of providing some monetary compensation for would-be entitlements of citizens abroad.

CONCLUSION

We argue that the constitutional right to health does not extend beyond the border because Mexico cannot feasibly control the health care that citizens have access to abroad and lacks the authority to do so. Thus, the Mexican government, cannot feasibly commit itself to guarantee access to services abroad, or to regulate the quality or cost of care. While the Mexican government cannot provide entitlements abroad, there are sound reasons for providing monetary compensation for what would be entitlements with the resources it can control because doing so mitigates catastrophic expenditure and helps meet health needs. A fair and deliberative priority setting process is needed to define what the limit in compensation should be and under what conditions. Mexican citizens abroad have pressing health needs that should be met fairly. Developing feasible policies that are just is imperative for this population.
PAPER 2: IMMIGRANTS AND THE AFFORDABLE CARE ACT: CHANGES IN COVERAGE AND ACCESS TO CARE BY DOCUMENTATION STATUS

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ABSTRACT

Little is known about the effects of the ACA’s coverage expansion among immigrant groups of differing legal status. Using data from the California Health Interview Survey (2003-2016), we compare changes in health coverage and access to care among immigrants in California before and after implementation of the ACA. We find that the ACA has led to major gains in coverage for lawful permanent residents in California, similar in scope to changes among citizens. However, unauthorized immigrants have experienced only modest increases in coverage, with the result disparity in uninsured rates for this group relative to citizens and permanent residents widening considerably since 2014. Findings indicate a significant increase in having a usual source of care across all groups, but without a significant change in disparities for this outcome. Our results have important implications for the intersection of health policy, immigration, and health equity.
INTRODUCTION

In the U.S., a person’s legal status is a key determinant of health insurance options, which in turn facilitates access to health care (5, 6). The relationship between legal status, coverage, and access has been difficult to study because there are limitations in data availability for ascertaining legal status in the U.S. population (34). Yet, unauthorized status is widely recognized as a major barrier to attaining health coverage and care (34, 93-96). Meanwhile, under the Affordable Care Act (ACA), income-eligible lawful permanent residents (LPRs) or “green card holders” are eligible for subsidized insurance either via Medicaid expansion (if they have been LPRs for at least 5 years) or Marketplace coverage (31).

More than 30 states have expanded Medicaid, which is available to LPR’s who meet income criteria and have been legal residents for at least 5 years. While most states expanded Medicaid in 2014, some states including California – home to the nation’s largest foreign-born population – used a federal Medicaid waiver and expanded earlier. California’s early expansion was approved in November 2010 and coverage began to take effect in some counties in July 2011 (28). The early expansion increased coverage among both citizens and non-citizens, though previous research was unable to distinguish between LPRs and unauthorized immigrants (31).

The Personal Responsibility and Work Opportunity Reconciliation Act, signed in 1996, imposed a 5-year waiting period for Medicaid on LPRs (29). California did not include this policy and continued to use state funds to cover benefits for LPRs without a waiting period (30). Under the ACA, LPRs gained new coverage options, both through expanded Medicaid eligibility (for those meeting the 5 year requirement) and advanced premium tax credits (APTCs) for Marketplace coverage, which did not include a waiting period for LPRs (5).
In contrast, unauthorized immigrants are ineligible for full Medicaid benefits, APTCs, Marketplace coverage even without a subsidy, or any other federal assistance to obtaining coverage, other than emergency Medicaid (which is limited to life-threatening conditions and labor/delivery) (7). In addition, the individual mandate applied to LPRs but did not apply to unauthorized immigrants (7, 97). Again, California has instituted state and county level policies to cover some of the populations excluded from the ACA. Deferred Action Children Arrivals (DACA) designees are eligible for full-scope Medicaid funded by the state, and since 2016 the state covers all qualified children ages 0-18 in Medicaid, regardless of documentation status (14).

Ongoing efforts to “repeal and replace” the ACA provide an unknown future for health coverage for millions in the United States. After more than five years of implementation, abundant evidence indicates that the ACA increased insurance coverage and access (6, 8, 12, 13, 98, 99), while partially reducing disparities – though substantial disparities remain (12, 31, 100-103). Little is known in California or nationally about the ACA’s effects on immigrant groups of differing legal status. National data does not ascertain legal status, so studies on immigrants are usually restricted to measurements of years lived in the U.S. for foreign born respondents (5).

A recent study examined these changes between naturalized citizens, non-recent immigrants (>5 years) and recent immigrants (<5 years) in the U.S. The study found gains in coverage in all groups and also observed improvements in access and utilization measures, but was unable to assess changes for LPRs versus unauthorized immigrants and did not account for the effect of early expansion (5). Another recent paper found that insurance coverage increased for all Latinos after the full implementation of the ACA, and disparities in coverage and lack of usual source of care declined between Mexicans and other Latinos (32).
Our paper adds important new evidence on ACA-related effects on immigrants of different legal status. We focus on California, the state with the largest foreign-born population, using a unique state-wide survey that allows us to examine subgroups based on legal status. Our objective was to compare changes in health coverage, access to care, and utilization for immigrants in California before and after implementation of the ACA.

DATA AND METHODS

Sample

We use data from the California Health Interview Survey (CHIS) from 2003-2016, which includes the “Pre-ACA” (2003-2010), “Early ACA” (2011-2013) and “Full ACA” (2014-2016) implementation period. CHIS is the largest single-state health care survey in the U.S. It is a random-dial telephone survey conducted by the UCLA Center for Health Policy Research in collaboration with the California Department of Public Health and California Department of Health Care Services. The survey routinely oversamples Korean and Vietnamese speaking populations, and asks questions regarding citizenship and legal status and is representative of California’s non-institutionalized population living in households (34, 104). Our sample includes 203,536 California residents between the ages of 19-64.

Coverage Measures

CHIS groups respondents into seven mutually-exclusive categories of coverage: uninsured, Medicaid (the state’s Medicaid program), CHIP, Medicare, employment based, private non-group, and other public. For the purposes of this study, we combined CHIP with Medicaid.
Access and Utilization Measures

We analyzed two commonly-used measures of access to care (11, 32, 100): whether a person reported having a usual source of care and whether they had visited a doctor in the past year.

Measures of Immigration Status

CHIS asks all respondents about citizenship and legal status, based on three survey items. First, participants are asked if they were born in the U.S.; if so, they are coded as U.S. citizens. Second, those that report being born outside the US or who do not respond to that question are asked if they are naturalized citizens. Finally, those that answer “no” or do not provide a response are asked if they are “a permanent resident with a green-card.”

CHIS has a low rate of item non-response for these questions: 1.2% for the citizenship question, and 3.6% for the permanent residency question, although non-response has increased through time periods for both citizenship and LPR questions (105). The survey uses various imputation methods to deal with non-response and has been validated for legal status accuracy using multiple independent population surveys that ascertain self-reported legal status (105, 106). CHIS has an adult response rate of 41.3% (107). CHIS also provides estimates consistent with other population estimates of the proportion of unauthorized, LPRs and citizens in California (27, 105, 108).

Based on these questions, we grouped respondents into three categories: citizens (n=177,107), LPR/green card (n=15,573), and unauthorized and/or non-LPR (n=10,856). Those who are U.S. born citizens (n= 149,035) or naturalized citizens (n=28,072) are grouped into a “citizen” category because prior research suggests little difference in coverage between these two groups (109). According to the U.S. Census Bureau, about 27% of Californians are foreign-born, which makes this sample comparable to Census estimates (3). We refer to the group of non-citizens
without a green-card as “unauthorized” for brevity, though an estimated 3% of all immigrants are legal temporary immigrants and 7% are refugees, who are also eligible for the ACA’s coverage provisions (110).

**Data Analysis**

We use descriptive statistics and multivariate regression models to assess changes in health coverage under the ACA for the three groups described above. Consistent with the literature on disparities, we first present unadjusted estimates of disparity (111-113). Citizens are our reference group in all models. We add an “Early ACA” indicator and group interaction item for 2011-2013 in addition to the “Full ACA” implementation period (2014-2016) to filter out the impact of California’s early expansion.

After presenting unadjusted disparities across these groups, we then conduct multivariate regression to account for potential confounders that might bias our assessment of ACA-related changes, using linear probability models for ease of interpretation. Our selection criteria for covariates was based on previous studies that identified factors affecting coverage, access and utilization (5, 114). These covariates include age, marital status, sex, poverty level, education, a linear time trend, and county-level statewide annual unemployment rate (115, 116). We adjust for county-level statewide annual unemployment rate by merging a county level identifier with the county-year specific unemployment rates from the Bureau of Labor Statistics (117) to adjust for potential confounding of economic factors (116). Lastly, we did post-regression estimation testing to determine whether changes in outcomes were significantly different between immigrant groups and citizens (the reference group). We hypothesized that the ACA led to significant coverage and access gains for the LPR population and citizens decreasing disparities between these groups. However, restrictions for those with an unauthorized status limited these
increases for that population, which can widen disparities between being unauthorized and others.

LIMITATIONS
This study has some important limitations. We only can analyze a single state, before and after ACA implementation, and therefore we do not have a control group. While our preliminary findings indicate changes in health coverage and access to care for different legal status groups after the ACA and we adjust for county-level unemployment rates, other policies or economic factors may have contributed to these changes. California’s unique population and policy environment also may not generalize to other states.

The CHIS also does not allow us to distinguish between those who have full or partial Medicaid coverage, which may be the case for much of the unauthorized population that reported having Medicaid. If anything, this means our results may overstate the effective coverage available to unauthorized immigrants, since some are likely reporting Emergency Medicaid as coverage, which is not comprehensive insurance.

RESULTS
Figure 2.1 presents the percentages of adults ages 19-64 who are uninsured in California by legal status, from 2003-2016. Similar graphical presentations for Medicaid/CHIP, Employer Sponsored Insurance (ESI) and Private Non-group are presented in the Appendix 2.1. For all three groups, the uninsured rate remained relatively stable in the Pre-ACA period (2003-2010). During this time, there were wide disparities in coverage, with the highest uninsured rate among unauthorized immigrants, lowest among citizens, and LPRs in between. In 2011, during the early-expansion stage (2011-2013), the proportion of uninsured for LPR began to drop with a similar decrease for citizen starting in 2013, but no noticeable change in the unauthorized
category. In the full ACA implementation period (2014-2016), the uninsured rate dropped in all three groups. While the disparity between citizens and LPRs shrank after 2014, the disparity between unauthorized immigrants and LPRs widened.
FIGURE 2.1. Percentage of Uninsured in California

SOURCE: California Health Interview Survey, 2003-2016. Adults ages 19-64.
Figure 2.2 illustrates the distribution of coverage type by legal status before and after the ACA. The proportion of uninsured dropped for all legal status groups. The largest drop in uninsured was for LPRs, from 32.1 to 18.0%. There was an increase in Medicaid/CHIP coverage in all groups. Medicaid/CHIP coverage increased from 10.5 to 23.2 percent for citizens, from 18.2 to 36.6 percent for LPRs, and from 22.3 to 32.9 percent for unauthorized immigrants. Changes in private non-group coverage were more modest, and ESI slightly decreased within all groups.
FIGURE 2. Changes in Coverage Type in California Pre vs. Post ACA expansions 2003-2016
Table 2.1 presents unadjusted and adjusted regression-based estimates for changes in insurance coverage by legal status associated with the ACA. Our analysis demonstrates significant gains in coverage within all groups in the full ACA implementation period, in both unadjusted and adjusted models that include an interaction term for “Early-ACA.” The unadjusted model shows the largest gains for LPRs with a drop of 13.3 (p<.001) percentage points, followed by a drop of 5.2 (p<.05) percentage points for unauthorized immigrants, and a drop of 2.8 (p<.001) percentage points for citizens. Adjusted models provide similar findings, with a significant decrease of 12.2 (p<.001) percentage points for LPRs, 2.6 for citizens (p<.001) and 4.6 for unauthorized immigrants, that was not significant. These changes in insurance coverage did not differ significantly over time. The estimate for LPRs was significantly greater than the change among citizens (p<.001), indicating a significant narrowing of the disparity between citizens and LPRs for being uninsured.

Findings also indicate significant gains in Medicaid/CHIP coverage within all groups except the unauthorized in the unadjusted models. Once again, the largest gains were found in the LPR category with an increase of 8.9 (p<.001) percentage points. We find an increase in Medicaid/CHIP coverage of 4.3 (p<.001) percentage points in the citizen category and 3.9 percentage points for the unauthorized, but this change was not significant. The adjusted model provides similar findings for citizens. LPRs present larger gains in the unadjusted model with a significant increase of 12.2 (p<.001) percentage points. The unauthorized category has gains of 6.4 (p<.01) percentage points. Like the results for the uninsured rate, LPRs experienced a significantly greater change than did citizens (p<.001), indicating a significant narrowing of the disparity for Medicaid/CHIP coverage. Changes in the private-nongroup category were non-
significant in both unadjusted and adjusted models. Similarly, no significant changes were found in the ESI group across categories in either of the models.
TABLE 2. 1. Pre vs. Post Changes in Health Insurance in California, Based on Immigration Status

<table>
<thead>
<tr>
<th>Coverage Type</th>
<th>Citizens</th>
<th>LPR</th>
<th>Unauthorized</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Uninsured</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline Pre-ACA</td>
<td>(%)</td>
<td>14.4</td>
<td>32.1</td>
</tr>
<tr>
<td>(2003-2010)</td>
<td></td>
<td></td>
<td>51.1</td>
</tr>
<tr>
<td>Change Post-ACA</td>
<td>(%)</td>
<td>-2.8***</td>
<td>-13.3***</td>
</tr>
<tr>
<td>Unadjusted</td>
<td>(2014-2016)</td>
<td></td>
<td>-5.2*</td>
</tr>
<tr>
<td>Change Post-ACA</td>
<td>(%)</td>
<td>-2.6***</td>
<td>-12.2***</td>
</tr>
<tr>
<td>Adjusted</td>
<td>(2014-2016)</td>
<td></td>
<td>-4.6</td>
</tr>
<tr>
<td>P-val vs. citizens</td>
<td>N/A</td>
<td>&lt;.001</td>
<td>0.4</td>
</tr>
<tr>
<td>Adjusted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Medicaid/CHIP</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline Pre-ACA</td>
<td>(%)</td>
<td>10.5</td>
<td>18.2</td>
</tr>
<tr>
<td>(2003-2010)</td>
<td></td>
<td></td>
<td>22.3</td>
</tr>
<tr>
<td>Change Post-ACA</td>
<td>(%)</td>
<td>4.3***</td>
<td>8.9***</td>
</tr>
<tr>
<td>Unadjusted</td>
<td>(2014-2016)</td>
<td></td>
<td>3.9</td>
</tr>
<tr>
<td>Change Post-ACA</td>
<td>(%)</td>
<td>4.7***</td>
<td>12.2***</td>
</tr>
<tr>
<td>Adjusted</td>
<td>(2014-2016)</td>
<td></td>
<td>6.4**</td>
</tr>
<tr>
<td>P-val vs. citizens</td>
<td>N/A</td>
<td>&lt;.001</td>
<td>0.4</td>
</tr>
<tr>
<td>Adjusted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Private non-group</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline Pre-ACA</td>
<td>(%)</td>
<td>7.7</td>
<td>4.3</td>
</tr>
<tr>
<td>(2003-2010)</td>
<td></td>
<td></td>
<td>2.9</td>
</tr>
<tr>
<td>Change Post-ACA</td>
<td>(%)</td>
<td>0.4</td>
<td>3.2</td>
</tr>
<tr>
<td>Unadjusted</td>
<td>(2014-2016)</td>
<td></td>
<td>-1.7</td>
</tr>
<tr>
<td>Change Post-ACA</td>
<td>(%)</td>
<td>&lt;0.1</td>
<td>2.5</td>
</tr>
<tr>
<td>Adjusted</td>
<td>(2014-2016)</td>
<td></td>
<td>-1.9</td>
</tr>
<tr>
<td>P-val vs. citizens</td>
<td>N/A</td>
<td>0.2</td>
<td>0.01</td>
</tr>
<tr>
<td>Adjusted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Employer Sponsored Insurance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline Pre-ACA</td>
<td>(%)</td>
<td>63.3</td>
<td>42.2</td>
</tr>
<tr>
<td>(2003-2010)</td>
<td></td>
<td></td>
<td>22.1</td>
</tr>
<tr>
<td>Change Post-ACA</td>
<td>(%)</td>
<td>-1.4</td>
<td>2.3</td>
</tr>
<tr>
<td>Unadjusted</td>
<td>(2014-2016)</td>
<td></td>
<td>3.1</td>
</tr>
<tr>
<td>Change Post-ACA</td>
<td>(%)</td>
<td>-1.8</td>
<td>-1.4</td>
</tr>
<tr>
<td>Adjusted</td>
<td>(2014-2016)</td>
<td></td>
<td>-.2</td>
</tr>
<tr>
<td>P-val vs. citizens</td>
<td>N/A</td>
<td>0.8</td>
<td>0.4</td>
</tr>
<tr>
<td>Adjusted</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.05  **p<.01  ***p<.001

SOURCE Authors' analysis of data from the California Health Interview Survey, 2003-2016. NOTES: Our covariates are: a linear time-trend, age, marital status, sex, Federal Poverty Level (FPL), education, county-level statewide annual unemployment rate.
Table 2.2 presents adjusted and unadjusted regression-based estimates for changes in access and utilization associated with the ACA by legal status. Results for usual source of care indicate that citizens experienced gains of 4.4 (p<.001) percentage points from a baseline of 85.1 percent, LPR of 7.2 (p<.001) percentage points from a baseline of 73.9 percentage points, and unauthorized of 6.1 (p<.05) percentage points from a baseline of 59.9. The adjusted model shows similar results for the citizen and LPR groups with significant gains of 4.8 (p<.001) percentage points and 6 (p<.05), respectively, but the adjusted gain for unauthorized immigrants was no longer significant. Changes in disparities between groups over time were also not significant. We found no significant changes in rates of visiting a doctor within groups or a reduction in the disparities between them after the ACA.
### TABLE 2.2. Pre vs. Post Changes in Access to Care and Utilization in California, Based on Immigration Status

<table>
<thead>
<tr>
<th>Coverage Type</th>
<th>Citizens (%)</th>
<th>LPR (%)</th>
<th>Non-LPR and Unauthorized (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Usual Source of Care</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline Pre-ACA (2003-2010)</td>
<td>85.4</td>
<td>72.9</td>
<td>59.9</td>
</tr>
<tr>
<td>Change Post-ACA (2014-2016) Unadjusted</td>
<td>4.4***</td>
<td>7.2***</td>
<td>6.1*</td>
</tr>
<tr>
<td>Change Post-ACA (2014-2016) Adjusted</td>
<td>4.8***</td>
<td>6.0*</td>
<td>4.5</td>
</tr>
<tr>
<td>P-val vs. citizens Adjusted</td>
<td>N/A</td>
<td>0.6</td>
<td>0.9</td>
</tr>
<tr>
<td><strong>Visited a Doctor</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline Pre-ACA (2003-2010)</td>
<td>82</td>
<td>72.2</td>
<td>62.3</td>
</tr>
<tr>
<td>Change Post-ACA (2014-2016) Unadjusted</td>
<td>.39</td>
<td>.41</td>
<td>-.3</td>
</tr>
<tr>
<td>Change Post-ACA (2014-2016) Adjusted</td>
<td>.24</td>
<td>-1.1</td>
<td>-1.5</td>
</tr>
<tr>
<td>P-val vs. citizens Adjusted</td>
<td>N/A</td>
<td>0.5</td>
<td>0.5</td>
</tr>
</tbody>
</table>

*p<.05 **p<.01 ***p<.001

SOURCE Authors’ analysis of data from the California Health Interview Survey, 2003-2016. NOTES: Our covariates are: a linear time-trend, age, marital status, sex, Federal Poverty Level (FPL), education, county-level statewide annual unemployment rate.
DISCUSSION

Our study is one of the first analyses to examine the key role that legal status plays in determining coverage, access, and utilization after the ACA. Previous research has shown that the ACA led a decline in the uninsured rate among U.S. immigrants, along with improvements in access and utilization (5). This research adds to our understanding by examining the gains in coverage and access to care among all immigrants in California based on legal status and accounting for the state’s early Medicaid expansion. It also informs whether there has been declines in disparities.

In California, coverage trends started to increase during the early expansion (2011-2013) and augmented once the ACA came into full effect in 2014 (31). Our study shows similar findings for citizens and LPRs. However, smaller improvements in coverage for the unauthorized became evident after the ACA came into full effect. This finding sheds light on differences in coverage improvements during the early expansion period, indicating legal status affected coverage eligibility.

Consistent with other research, we find gains in coverage that were largely the result of Medicaid uptake, but disparities remain among subgroups (6, 8, 102). This is also consistent with the Agency for Healthcare Quality and Disparity Report that found that disparities have remained after the ACA policy change (118). One of our key findings is that the ACA has led to major gains in coverage for legal permanent residents in California, similar in scope to changes among citizens. Our data suggests that the proportion of LPRs with Medicaid coverage nearly doubled after the ACA. Importantly, the Medicaid coverage disparity between legal residents and
citizens significantly narrowed after implementation of the ACA. We found non-significant changes for ESI and private-nongroup coverage types across all legal status categories.

Findings in the unadjusted coverage and Medicaid/CHIP models suggest modest gains for unauthorized immigrants. These gains may reflect state efforts at the county-level and other programs such as providing full scope Medicaid to DACA recipients that are now adults, as well as an increased number of individuals eligible for Emergency Medicaid due to the ACA expansion (14). Despite these gains, significant disparities in Medicaid coverage between unauthorized immigrants and the rest of the population persist. Unauthorized immigrants in Medicaid generally only have emergency and pregnancy-related coverage (119). As such, the true remaining disparities in coverage may be worse than our results suggest since the unauthorized that appear to be covered are receiving less than the essential services offered by Medicaid.

Another key finding highlights the ACA’s impact on access and utilization by legal status. Despite persistent disparities, we find that the proportion of people that have a usual source of care increased within all group categories. This finding is consistent with previous research suggesting that usual source of care is associated with having coverage, and may also reflect in part some of the county-based safety net programs to expand primary care, even in the absence of comprehensive health insurance (120).

**POLICY IMPLICATIONS**

Governor Gavin Newsom’s agenda on health coverage is to include all Californians regardless of their legal status, starting by extending the Health for All Kids program from 19 to 26 years of age (35). The Californian State Assembly plans to convene hearings in the near future with the Select Committee on Health Care Delivery Systems and Universal Coverage with
the purpose of evaluating coverage models and various approaches to expand health coverage to all Californians (35). As California considers further efforts at the state and county level to reduce disparities in Medicaid between unauthorized and citizens, our findings can be utilized by stakeholders to provide important data for those discussions.

More broadly, while we should be cautious in extrapolating nationally from California, our results bring new evidence that legal immigrants – particularly permanent residents – appeared to have benefited substantially from the ACA’s coverage expansion, resulting in a narrowing of coverage disparities compared to U.S. citizens. However, safety net organizations caring for large numbers of unauthorized immigrants may not have benefited as much from the ACA coverage expansion. Concerns remain about changes in funding streams for these organizations such as Disproportionate Share Hospital payments and Federally-Qualified Health Center grants.

Finally, disparities in Medicaid coverage between LPRs and unauthorized immigrants that remain post-ACA may have even worsened since our data was collected. Given recent concerns over chilling effects in health care from immigration enforcement reducing unauthorized immigrants’ willingness to obtain care (14, 21), these disparities could widen soon in the absence of any comprehensive immigration reform.
PAPER 3: ADAPTATIONS TO IMPLEMENT THE POSITIVE MINDS-STRONG BODIES INTERVENTION FOR MINORITY ELDERS IN COMMUNITY AGENCIES

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Massachusetts General Hospital. Boston, MA
ABSTRACT

Community based organizations (CBOs) provide preventive programs to serve a wide array of minority elders. Yet, they are constantly underfunded and understaffed, with limited capacity to expand services. We explored what adaptations could facilitate the adoption of a successful evidence-based intervention to reduce mental symptoms and physical disability for minority elders. A survey with 30 CBO staff, 4 focus groups, and 20 in-depth interviews were conducted to examine staff perspectives about the intervention, and factors needed to facilitate its adoption. The participants identified better payment for the sessions and decreased levels of workload as factors that could foster staff motivation, self-efficacy and retain them long-term to provide the intervention. Capacity building strategies such as identifying committed staff who could provide a ‘train the trainer’ model and adapting training tools appeared as priorities to ensure adoption of the intervention. Adapting the intervention to include strategies to overcome financial obstacles also emerged as a recommendation. Our work suggests that staff that presented the Positive Minds – Strong Bodies (PM-SB) offer important insights on how to adapt the intervention for implementation in CBOs and facilitate the transition from a research trial to a scalable implementation.
INTRODUCTION

Minority elders, or people 65 and older, represent a rapidly increasing sector of the aging population and are fast becoming a large segment of aging America (40, 121, 122). Today, one in every four seniors over 65 are part of a minority group, and the numbers are expected to increase (123). Elevated symptoms of depression (41-43), anxiety (39, 44) physical disability (45, 46) and dementia (47) are common in elders, especially in minority elders (40). Yet, there are significant barriers to obtain preventative treatment (39). These symptoms are often unrecognized by health providers (124, 125) and treated as a normal process of ageing (126) and loss of social ties (127). Even when recognized, there are barriers to accessing services because of the lack of providers who can service linguistic minorities; transportation difficulties; and limited knowledge of where to go (48). When these conditions are untreated, they lead to substantial incapacity and increased risk of disability (41, 49, 50).

CBOs are considered vital channels for eliminating disparities by enabling community participation in the health system (51). These agencies are quickly becoming important providers of evidence-based intervention programs (EBI) for mental health and other prevention initiatives related to substance use (52), sexually transmitted diseases (STIs) (53) and teen pregnancy (54), among others (55-57). Importantly, they offer an accessible platform for extending the reach and impact of EBIs for diverse populations, including elderly minorities. Nonetheless, funding in many CBOs is limited, and organizational barriers can hinder successful implementations of EBIs (57).

In responding to these financial and structural barriers, CBOs must make adaptations, or changes to evidence-based programs to facilitate their transition from the research stage to “real
world” settings (58). Improving the process of translating research into practice, or what is called the “implementation gap,” has received increasing attention in the implementation science field (57, 60). In this context, implementation is, “the use of strategies to adopt and integrate evidence-based health interventions and change practice patterns within specific settings” (128, 129). However, adaptations that facilitate implementation of EBIs in CBOs are seldomly studied, continuing the “implementation gap” (57, 58). Knowledge is limited since data collection concludes when the grant or program funding stops (59). The chronic funding gap and staff shortages (57) also prevent data collection to further our understanding on how EBIs are implemented by CBOs (60, 61).

To determine what factors may facilitate the adoption of EBIs in CBOs, the implementation science literature supports continuous input from the community organizations’ staff (60). Understanding staff’s perceptions of EBIs is important because their attitudes influence how and if they adopt them (130), helping close the “implementation gap.” At the same time, it is crucial to identify and address barriers experienced by staff during the trial to enhance successful transition to full implementation (131). Mixed-method study designs help identify implementation challenges (128) by both examining broad trends and gathering in-depth understanding of the problem (132, 133).

Few studies have examined the impact of delivering EBI programs in a CBO. Some studies that investigated staffs’ perceptions of barriers and facilitators to implement an EBI in a CBO include addiction prevention treatments (52, 131), HIV/AIDS prevention (53, 128, 134), teen pregnancy prevention (54), and child mental health interventions (135). These studies find barriers related to organizational culture, such as staff resistance to program implementation, lack of adherence from participants, and lack of resources to successfully implement.
Establishing relationships between CBOs and academic research institutions as well as hiring skilled staff have been found to be important facilitators of a successful implementation (57). There is no study that the authors know that investigates the challenges and assets for implementing a disability prevention EBI that targets elder minorities in CBOs.

The present study addresses this gap by examining staff’s perspectives of an EBI in the clinical trial stage, Positive Minds – Strong Bodies (PM-SB), that targets mental and physical disability in minorities elders. PM-SB is currently implemented in different Community Based Organizations (CBOs) in Massachusetts, New York, Florida, and Puerto Rico for elders 60 and over who present with elevated mood disorder symptoms and deterioration in their mobility. Like most cases, these CBOs are understaffed and underfunded. The fact that the PM-SB is in the clinical trial stage presents a unique opportunity to investigate factors that will facilitate its transition from research to a scalable program for elderly minorities in CBOs. Findings will be used to inform the PM-SB implementation specifically, and to improve EBI implementation in CBOs, more broadly. We address two main questions: What are staff perceptions, barriers and facilitators in offering PM-SB in CBOs? What recommendations would staff have to ensure long term adoption of PM-SB by CBOs in the future?

PROGRAM BACKGROUND
The “Positive Minds-Strong Bodies” introduces a capacity-building model to enhance short and long-term implementation of disability prevention programming for elder minorities. Evidence shows that there is a reciprocal feedback loop between mental and physical health among elders, with treatment for mood conditions reducing physical disability

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18 The trial is financed through a grant funded by the National Institute on Aging (NIA) and the National Institute of Mental Health (NIMH), the Disparities Research Unit’s Minority Elders project brings together collaborators at Massachusetts General Hospital, New York University, and University of Puerto Rico, along with partner community-based organizations in Massachusetts, New York, Florida and Puerto Rico.
and treatment of functional limitations decreasing symptoms of depression and anxiety (39). The literature also suggests that including cultural adaptations (i.e. language and culturally adept behavior of the service provider, among others) to mental health interventions enhances their effectiveness when targeting minorities (136-138).

The program seeks to address minority elders’ barriers to receiving mental health and physical health services by offering a two-part intervention among CBOs that already service minority elders. The mental health component of the intervention, known as Positive Minds, consists of 10 sessions of individual psycho-education and cognitive behavioral therapy (CBT), provided by Community Health Workers (CHWs). The physical health component of the intervention, ‘Strong Bodies’, includes 36 sessions of exercise provided over 12-weeks by exercise trainers (ETs). Research assistants (RAs) are responsible for recruiting participants and conducting interviews periodically to collect data on participants’ progress. Additionally, the program has site-leaders and coordinators that supervise CHWs, ETs, and RAs, assist with administrative tasks and support outreach initiatives.

The intervention seeks to deliver services to minority elders from diverse backgrounds in English, Spanish, Mandarin and Cantonese, providing a unique opportunity to deliver services to minorities of diverse backgrounds. There were 307 participants enrolled in the program that were mostly Latino, Asian or Black (African American or Afro-Caribbean) elders 60+ years of age with mild to severe depressive (PHQ-9≥5)(139) or anxiety symptoms (GAD 7≥5) (140), and without any specialty mental health care in the past 3 months. They also had to have mild to moderate scores between 3 and 11 on the Short Physical Performance Battery (SPPB) (141) demonstrating some mobility limitations but not home-bound. Participants were excluded if they had a history of psychosis, mania or substance use disorders; current or last 3 months of specialty
mental health treatment, if the patient lacked capacity to consent or was cognitively impaired; or patient’s doctor advised against any strenuous exercise; or if patient had current suicidal risk (score of 4 or 5 on Paykel suicide questionnaire) (142), whereby participant were referred for immediate treatment to specialty care. Exclusion from the disability component happened if participant was physically unstable, home-bound, had an acute or an exacerbation of a chronic disease, or a neuro-musculoskeletal impairment. Results described in Alegria et al., forthcoming show effectiveness of the PM-SB intervention (143). Sixty nine percent of participants completed 10 sessions of the Positive Minds and forty seven percent completed 26-36 sessions of the Strong Bodies. Forty six percent of participants completed both 6+ sessions of Positive Minds and 25+ sessions of Strong Bodies.

**Conceptual Framework**

Consistent with previous work that investigates staff’s perceptions of how EBIs can be adopted, we use the capacity-building interventions framework to guide our analysis (See Figure 3.1) (130). The framework presents that capacity building strategies are all the supports a practitioner needs to offer an EBI such as: training, tools, technical assistance, quality assurance/quality improvement. The framework suggests variations in the way those strategies are structured according to their dosage, delivery mode, collaborative design, or proactive design (144). Practitioner self-reported capacity is defined as self-reported awareness, knowledge, skills, self-efficacy, and motivation to engage in EBI planning behaviors and/or to adopt and implement a specific EBI (144). The intervention planning behaviors include collective behaviors such as identifying and prioritizing intervention options, adapting the intervention, developing an action plan, and evaluating processes and outcomes (130, 144, 145). Investigating practitioners’ self-reported capacity and their perceptions of capacity building strategies and
planned behaviors can be effective at increasing EBI adoption and implementation because it identifies the adaptations that are needed to achieve the intended outcomes (130, 146, 147).

**FIGURE 3. 1 Capacity Building Intervention Conceptual Framework**
METHODS

We used a mixed method approach that combined results from survey data (quantitative component), and focus groups and in-depth interviews (qualitative component) to examine 1) practitioners’ self-reported capacity; 2) practitioners’ perceptions about the PM-SB capacity building strategies; and 3) PM-SB perceived barriers and facilitators for adoption after the trial comes to an end. Information from focus groups was used to understand practitioners’ perceived barriers and facilitators to adopt the program. The follow-up in-depth interviews were designed to get a richer understanding of practitioners’ self-reported capacity, perceptions about the capacity building strategies in addition to barriers and facilitators to adopt the PM-SB. Survey data was utilized to examine practitioners’ self-reported capacity (See summary of methods in Table 3.1).
### TABLE 3.1. Summary of Methods

<table>
<thead>
<tr>
<th>Participation</th>
<th>Survey (Quantitative Data)</th>
<th>Focus groups (Qualitative Data)</th>
<th>In-Depth Interview (Qualitative Data)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants</td>
<td>N=30 CHW, ET, RAs and Site Leaders that participated in stakeholder meeting</td>
<td>Two-step group discussion guided by questionnaire 1. small focus groups based on the role (i.e. site leader, CHW, exercise trainer, RA) Duration: ~ 45 minutes 2. large group discussion Duration: ~ 35 minutes</td>
<td>In-depth semi-structured interview based on an interview guide. Duration: ~ 20-30 minutes</td>
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<tr>
<td>Procedure</td>
<td>Anonymous paper-based survey Duration: ~ 15 – 20 minutes</td>
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</tr>
<tr>
<td>Domains:</td>
<td>Practitioners Perceived Capacity</td>
<td>Practitioners Perceived Capacity</td>
<td>Practitioners Perceived Capacity</td>
</tr>
<tr>
<td></td>
<td>Self-reported knowledge about the project (how intervention is delivered)</td>
<td>Motivation: Would you be willing to continue to work on [exercise training] once partnering organizations are not involved</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self reported skills (adequate training)</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Resources (adequate time )</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Motivation (intervention is useful to me and agency)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Awareness (agency’s involvement improves well-being of population)</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>N/A</td>
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<td></td>
<td>N/A</td>
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<td></td>
</tr>
<tr>
<td>Overall Barriers</td>
<td>What are important steps to ensure staff is trained correctly once partnering organizations are not involved</td>
<td>What are the greatest barriers to maintain the program?</td>
<td>What are some of the issues that may arise for you after the trial ends to be able to continue to implement PM-SB?</td>
</tr>
<tr>
<td>Overall Facilitators</td>
<td>What supports would you need to maintain the program?</td>
<td></td>
<td>Is there anything you think [CHW] could do now to help ensure PM-SB continues to be implemented after the trial ends?</td>
</tr>
<tr>
<td>Emerging themes</td>
<td>Purpose and goals of project are clear Intervention is perceived as impactful Adequate training and understanding of responsibilities but not enough time to fulfill them</td>
<td>Staff turnover is a barrier to implementation Restructuring was disruptive leading to feelings of burnout and being understaffed Trainings and intervention is successful. Capacity building strategies for long-term adoption should include adapting tools Obtaining funds is critical for continuation of intervention.</td>
<td>Staff turnover is a barrier to implementation burnout and compensation are related issues. Trainings can be adapted to include a train the trainer model and continue to include methodologies that utilize: technology, role-play and cultural adaptations Funding strategies to overcome financial obstacles such as reimbursing through Medicare and Medicaid should be implemented.</td>
</tr>
</tbody>
</table>

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Quantitative component

Survey Data

Participants

The participants were PM-SB staff that implemented the program (n=30). Their specific roles were: site leaders/coordinator (n=8), CHWs (n=7) exercise trainers (n=4), research assistants (n=8), and other research team member (n=5) (characteristics of participants included in Appendix 3.1). Practitioners were invited to participate during a PM-SB stakeholder meeting that took place on January 2018 in Boston, Massachusetts organized by the MGH Disparities Research Unit. The meeting included staff from the 6 CBOs: 3 in Boston, 1 in New York, 1 in Florida, and 1 in Puerto Rico. Only people that implement the PM-SB trial as a site leader/coordinator, exercise trainer, CHW or RA were asked to participate in the survey (n=30)

Procedure

Participants were invited to respond to an anonymous paper-based survey during the stakeholder meeting to examine practitioners’ self-reported capacity (i.e. awareness, knowledge, skills, self-efficacy, and motivation) to provide the PM-SB intervention. The survey lasted about 15-20 minutes. The survey was developed by the MGH Disparities Research Unit as part of a comprehensive yearly evaluation of the PM-SB. Measures were adapted from previous studies that derive instruments to measure the capacity of community-based initiatives (148, 149).

Participants were instructed to rate their agreement with a series of 16 statements on a 5-point Likert scale (1=strongly agree to 5=strongly disagree; don’t know optional response). Lower mean scores (ranging from 1 and 2) indicated strong to very strong agreements with statements whereas higher mean scores (4-5) indicated disagreement to strong disagreement with statements (150). Participants that responded 3 were neutral (150).
The statements examined three domains. The ‘understanding the purpose of the study’ domain (5 items) was used to rate their self-reported knowledge about the project (i.e. ‘I understand how the intervention can be delivered in a Community-Based Organization’). The roles and responsibilities domain (5 items) asked questions used to analyze their self-reported skills (i.e. ‘I have adequate training to fulfill my responsibilities) and resources (i.e. ‘I have adequate time to fulfill my responsibilities). Lastly, participants replied to the ‘perceived impact’ domain (6 items). This domain was used to inform on practitioners’ motivation (‘I am confident this intervention is useful to me and my agency’) and awareness (i.e. ‘My agency's involvement will improve our ability to address the health and well-being of elders with disabilities’)

**Qualitative component**

**Focus groups**

**Procedure**

After the paper-based survey was administered, the same participants (PM-SB staff that implemented the program as: site leaders/coordinators, CHWs, exercise trainers, and research assistants) took part in small and large focus groups (n=30). The focus group discussions were designed to understand practitioners’ perceived barriers and facilitators to adapt the program for implementation. Discussions were guided by a semi-structured interview guide developed by the MGH Disparities Research Unit at the Massachusetts General Hospital as part of a comprehensive yearly evaluation of the PM-SB. For the purposes of this paper, we present only findings from prompts related to perceived barriers and facilitators to implement the intervention into the existing infrastructure after the trial ends including: Do you see your organization
maintaining this program? What supports would you need to maintain the program? What are the
greatest barriers to maintaining the program?

Participants were first given the opportunity to think about these points prior to engaging in a
larger group discussion. Then, participants were given a paper with the questions to individually
write their answers. After that, they participated in a two-step group discussion facilitated by a
group of researchers that worked as an independent consultant team not associated to MGH. To
discuss issues based on the role participants play in PM’SBB, individuals were divided into small
focus groups (lasting 45 minutes). Information was recorded by a designated note-taker. Then
participants took part in a large group discussion (lasting 35 minutes), recorded by the note-taker,
as a way to share their information and report back. All notes were reviewed and analyzed by an
independent consultant team that summarized the responses. For the purposes of this study, we
only report barriers and facilitators that were identified.

**In-depth interviews**

**Procedure**

After the focus group discussions, twenty participants volunteered for additional individual
in-depth interviews. Their specific roles were: Site Leaders/Program Coordinator (n=6), CHWs
(n=5), Exercise trainers (n=5), and Research Assistants (n=4) (See supplementary material for
more characteristics). The primary researcher (T.P.) approached each of the thirty participants
separately during the stakeholder meeting to invite them for a follow-up interview and twenty
volunteered to do so. The same primary researcher (T.P) conducted 20-30 min individual
follow-up semi-structured interviews. Eight were conducted face-to-face, and twelve were
completed by phone.
The in-depth interview guide was constructed to include four domains pertaining to various components of the intervention: capacity-building strategies (e.g., What are important steps to ensure staff is trained correctly once partnering organizations are not involved?), practitioners’ perceived capacity (e.g., Would you be willing to continue to work on [exercise training] once partnering organizations are not involved?), overall facilitators (e.g., Is there anything you think [CHW] could do now to help ensure PM-SB continues to be implemented after the trial ends?), and overall barriers (e.g., What are some issues that may arise for you after the trial ends to be able to continue to implement PM-SB).

All domains included questions tailored to the role and experiences of each participant, with corresponding probes. For example, if a participant was a CHW, questions about training referred to the training CHWs received. The interviews were audio-taped and transcribed verbatim by two researchers (T.P and P.C), stripping all identifiers. One interview was translated from Spanish to English by the bilingual interviewer for analysis purposes.

Two researchers (T.P. and P. C.) reviewed the transcript to identify themes and develop a coding. The same researchers independently performed open coding on the first two transcripts using a descriptive coding technique, where each emerging data element was assigned a code and included in a codebook. The codebook was updated and amended as descriptive coding with emergent codes continued (Appendix 3.2). The two researchers met regularly to discuss the consistency of coding, possible new codes, and any coding challenges. Discrepancies in coding were resolved through consensus discussions between the two researchers. To ensure inter-coder reliability a 3rd coder was included in randomly selected interviews to discuss discrepancies and finalize the coding.
Analysis was then followed by two levels of thematic coding. The first level of thematic coding focused on sorting concepts into barriers and facilitators of PM-SB adoption. The second level of thematic analysis focused on axial coding by identifying and classifying concepts into themes, which had not been previously identified, and subthemes to better understand staff’s perceptions of adaptations to the PM-SB for adoption. Thematic axial coding decisions were discussed among the research team. We used the qualitative research software Dedoose to help guide the analysis.

**RESULTS**

**Quantitative Analysis**

Table 3.2 presents results from the paper-based anonymous survey to investigate practitioners’ self-reported capacity (i.e. knowledge about the intervention, skills, self-efficacy, motivation and awareness about the impact of the intervention). We found a high level of self-reported capacity about the intervention. For the ‘Purpose of Intervention and Research’ domain the overall mean response for the 5 statements included was 1.45 (from a 1-5 Likert scale), which indicated agreement with statements focusing on participants’ understanding of the purpose of the intervention, the research associated with the intervention, and how it may be implemented in community-based settings. Answers in this domain ranged from 1-3, with only 2 people rating a question with a 3 on the Likert scale, indicating they were neutral.

Practitioners responses to the ‘roles and responsibilities’ domain, designed to ascertain self-reported skills and self-efficacy, varied. The overall mean score was 1.73, indicating a strong agreement about having adequate training to have the skills needed to meet their responsibilities. However, there was some variation as indicated by answers with ranges from 1-4 and 1-5, which
showed that at least one person rated the question as 4 or 5, respectively. The highest mean among participants was in response to having adequate time to fulfill responsibilities with a mean score of 2.27, which indicated slightly lower levels of agreement with the statement. The same question had a range of 1-5. A total of 6 people disagreed or strongly disagreed with this statement, one was a CHW, another was an ET, 2 were site leaders/coordinators and 2 were RAs.

Results showed high levels of agreement with each of the perceived impact statements, indicating a high level of motivation and awareness of the reach of the intervention. The items with the lowest mean scores, indicating strong agreement, in this domain were the sense that the project had improved their agency’s ability to address the health and well-being of elders (mean=1.45 range 1-4), the project’s benefits are greater than the challenges (mean = 1.48 range 1-4) and the project was useful to the participants and his/her agency (mean=1.43 range 1-3). Of these, the first two questions each had one respondent that disagreed with the statement. They were not the same respondent. The third question had two respondents that were neutral.
TABLE 3. Survey responses

<table>
<thead>
<tr>
<th>Domains and Questions</th>
<th>Mean</th>
<th>Range</th>
<th>Don’t Know</th>
<th>Blank/ NA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Purpose and Goals</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I understand the goals of the project</td>
<td>1.27</td>
<td>1-2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>I understand the purpose of delivering the intervention through a research study</td>
<td>1.37</td>
<td>1-2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>I understand how the intervention can be implemented in a community-based organization</td>
<td>1.69</td>
<td>1-3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>I think the outcomes that we hope to see for people involved in the intervention are appropriate</td>
<td>1.41</td>
<td>1-2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>My agency’s involvement in this project is improving our capacity to serve elders in our community</td>
<td>1.47</td>
<td>1-3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Roles and Responsibilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have a clear understanding of my responsibilities on the project</td>
<td>1.57</td>
<td>1-4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>I believe my responsibilities are appropriate</td>
<td>1.50</td>
<td>1-4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>I have adequate training to fulfill my responsibilities</td>
<td>1.47</td>
<td>1-2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>I have adequate time to fulfill my responsibilities</td>
<td>2.27</td>
<td>1-5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>There are systems in place to ensure that all partners are fulfilling their responsibilities in a timely manner</td>
<td>2.13</td>
<td>1-5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>I know whom to contact when I have a question about the project</td>
<td>1.47</td>
<td>1-3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Perceived Impact</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My agency’s involvement will improve our ability to address the health and well-being of elders with disabilities</td>
<td>1.45</td>
<td>1-4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>The project has increased the capacity of staff at my agency to meet the complex needs of elders with disabilities</td>
<td>1.75</td>
<td>1-4</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Research activities help us understand the effectiveness of the intervention</td>
<td>1.60</td>
<td>1-3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>The benefits of being involved in this project are greater than the challenges</td>
<td>1.48</td>
<td>1-4</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>I am confident that his intervention is useful to me and my agency</td>
<td>1.43</td>
<td>1-3</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

*Note. Likert Scale (from 1 to 5: 1 being Strongly Agree and 5 being Strongly Disagree with a Don’t know option).*
Qualitative Analysis

**Intervention perceived as effective at improving the lives of elderly minorities.** Findings from the thematic analysis drawn from the in-depth interviews seemed to support the data from focus group discussion. Overall, staff perceived the intervention to be effective at enhancing the lives of elderly minorities because they sensed an improvement in their moods and physical functioning. Participants reported that the intervention should continue. (See Table 3.3 for summary of focus group discussion and Table 3.4 for summary of thematic results of in-depth interviews). As one participant noted:

“[The PM-SB] has continuity in the process of transforming the attitude of people to try to improve their quality of life... I realized when a series of exercises ends I see happiness in that person. They feel good that they are still beings that are useful and can improve their daily life because their posture changed.”

**Barriers**

**Staff turnover as obstacle to meet the goals of the intervention.** The main barrier that emerged in both focus groups and in-depth interviews was staff turnover. Specifically, staff turnover appeared as a theme under which compensation and motivation were contributing factors that impacted practitioners’ roles and responsibilities. Some CBOs were not able to pay staff more than their base salary as a practitioner within the CBO due to the federal contracts where they were full-time staff. Other CBOs recruited university students or other professionals as volunteers and they did not provide them with compensation. Still other CBOs were not transparent about their distribution of resources.

In both the focus-groups and in-depth interviews, personnel stated that the high turnover rate within CBOs led to some difficulties with keeping CBO staff engaged with the project. They also voiced issues related to compensation. Some participants explained that there were two agencies that were not paying their staff or were delayed in paying them. During the in-depth
interviews, some staff reiterated this issue. Additionally, exercise trainers perceived compensation as lower ($30 a session) than to what they would otherwise make in a gym, and they identified it as the reason for staff-turnover. As one participant stated:

“I’m going after tomorrow... but pay the exercise trainers more because the rate I get is quite a bit lower than I would get as a personal trainer at the gym”

Limited staff time to fulfill their responsibilities. In both focus groups and in-depth interviews, staff stated that they struggled to figure out how to meet the demands of the project while balancing the other full-time responsibilities at their agency. For the most part, their full-time responsibilities remained the same, and the intervention was “added on” to the work they already had, leading to burnout. For example, community-based RAs noted during the focus groups that it was challenging for them to conduct outreach work within the community on top of their other responsibilities. CHWs in focus groups stated that the shortages created an overload with project cases. They usually had to complete 2 cases per CHW. Having to complete more participant sessions was perceived to be time and labor intensive. The also explained that the supervisory responsibilities were more than what they had expected. One participant explained her situation in the following way:

“[Being an RA] has been a great experience... But then I was given more tasks and things to do.”

Restructuring at sites disrupted teams. During the focus group discussion, respondents indicated that challenges emerged due to significant restructuring within the MGH and NYU sites, changes in site leadership, the withdrawal of existing CBO sites and the recruitment of new CBO sites, as well as turnover within the academic and CBO teams. The RAs explained that the turnover in site leaders was particularly disruptive because they played a very significant role in the execution of the study. For example, RAs in one site explained facing burnout due to being
asked to perform tasks that were not part of their role because of site leader turnover. The new site leader was less familiar with the division of roles on the project and there were not enough RAs to do the additional work such as conducting the baseline interviews on minority elders that was assigned to them. RAs in focus groups also discussed how the turnover in academic research staff made it challenging to fully support external CBO staff. Site leaders and CHWs explained feeling pressured to have new CHWs start delivering the intervention before they had received enough training or had developed enough confidence when CHWs in an agency left in the middle of the trial.

**Facilitators**

*Ensuring CBOs ability to provide effective training.* During the focus groups, participants noted that current trainings are effective for the roles that PM-SB requires. Moving forward in the implementation stage, adaptations to the training of new staff are needed to ensure the intervention continues. These included more guidelines in an adapted manual regarding intervention adaptation and maintenance need to be developed as well as some additional training from the academic partners for long term-adoption. Participants explained that any future training would need to focus on how to maintain intervention fidelity while limiting data collection to only what was essential.

In-depth interview participants perceived using a “train the trainer” model as a capacity building priority, whereby identifying committed staff and teaching them to train could be a useful strategy (151). Practitioners emphasized that it is important to have infrastructure in place to support ongoing training. They suggested that it is crucial to identify staff that is able and willing to train new staff once the trial ends. Being a staff member who has implemented
the program for an extended period and motivated about the project were considered factors need for the staff who would train others. As one participant noted:

“It is important to find someone that is serious about being part of the program, understands it’s goals…. has been in the organization for a longer period.”

Practitioners during the in-depth interviews suggested different strategies to ensure staff are trained correctly when the PM-SB is adopted based on their roles. Exercise trainers mentioned that supervision and fidelity checks that are currently done by recording a Strong Bodies session and sending it to someone who can supervise the exercise trainers should continue. They also stated that having initial face to face training, such as is currently done, is important. Exercise trainers identified receiving training in a bigger group as a viable way to cut down costs while maintaining fidelity. CHW also suggested continuing to include technology by having training sessions recorded and evaluated before the actual training. They believe this is useful to prepare staff that should be maintained during the implementation stage. Another strategy that was identified by CHWs as helpful was continuing to include roleplays during the actual face to face training session because it allows CHWs to practice more before they deliver the sessions. CHW that implement Positive Minds in the elderly Asian population also suggested further cultural adaptations as a strategy to address cultural barriers. Although the PM-SB is implemented in four languages and culturally adapted, they suggested including a session with PM-SB participants to talk about how social stigma affects mental health seeking. They reiterated the importance of ensuring all materials be culturally adapted for the target populations.

**Strategies to overcome financial obstacles**- Having strategies to overcome financial obstacles was also identified as an important theme that emerged during focus group discussions and in-depth interviews. In the focus groups, participants explained that applying for additional
funding would be essential to keep the program maintained in CBOs. Respondents also explained that some time should be set aside and dedicated to searching for funding opportunities. Furthermore, respondents from specific sites explained why they needed additional funding. In Puerto Rico, they would need funding for transportation of their participants and staff, as well as funding to train additional CHWs to deliver the intervention. Site leaders in the Boston and NY sites also highlighted the need to fund transportation, explaining that extreme weather meant they were increasingly going to participant’s homes.

During the in-depth interviews, participants proposed several ways to obtain funding after the trial ends. Some participants suggested the potential to receive funding by designing mechanisms for reimbursement from Medicare and Medicaid. They noted that many participants qualify for Medicare, and some are considered duals because they have both Medicaid due to disability and Medicare since they are over 65 years of age. A related recommendation was to obtain reimbursement through insurance companies. One participant had the following suggestions:

“*I think about Medicare and some are Medicare/Medicaid so there could be a reimbursement for prevention.... Or United Healthcare reimburses local YMCAs for people they lift into diabetes prevention so maybe if we enroll a certain number of Medicare or Medicaid participants, [agencies] will get reimbursed at a certain level.*”

Other recommendations included engaging local actors, such as the town mayor who could be interested in supporting the project and providing resources. Participants stated that even though the trial will end, partnering organizations could play an important role in securing funds. Their involvement in providing evidence of the intervention’s effectiveness and engaging stakeholders was perceived as a facilitator to receive funds since it gives CBOs an institutional backbone. Many staff believed that applying for grants was a feasible way to obtain funds. Some suggested continuing to work with partnering organizations to develop those grants.
TABLE 3. 2. Summary of Barriers and Facilitators from Focus Group Discussions

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Staff turnover</strong></td>
<td>Emerged due to restructuring in MGH and NYU sites - Turnover in site leaders is particularly disruptive. CHW feel pressure to deliver intervention before training is done. Not enough staff to implement intervention. Turnover leads to challenge in keeping CBO staff engaged. Balancing out labor demands with other full-time responsibilities in agency - burnout</td>
</tr>
<tr>
<td><strong>Facilitators</strong></td>
<td>Training - More guidelines regarding intervention adaptation and maintenance. Academic partners should provide additional training on adapting intervention for long-term adoption. Training would need to focus on how to maintain intervention fidelity while limiting data collection to only what’s essential. Funding - Using data for funding applications. Set aside time. Keep in mind different needs of sites. Research staff may be able to provide some support in future after grant ends.</td>
</tr>
</tbody>
</table>
# TABLE 3.3 Summary of Thematic Analysis

<table>
<thead>
<tr>
<th>Theme</th>
<th>Subtheme</th>
<th>Illustrative quotes</th>
</tr>
</thead>
</table>
| **Staff-turnover is an obstacle to meet goals of intervention** | Staff perceive they should be paid more for the time commitment | “I’m going after tomorrow... but pay the exercise trainers more because the rate I get is quite a bit lower than I would get as a personal trainer at the gym”  
“[Being an RA] has been a great experience but I’m not getting paid to do this. Then I was given more tasks and things to do” |
|                                           | Difficult to find motivated and qualified staff | “Just motivating people in my position is very hard ... it is very hard to motivate either the training of the CHW or the RAs the environment we have right now is uncomfortable.  
“[there is a] lack of support from my supervisor and lack of interest, lack of commitment and lack of understanding of the trial” |
| **Ensuring CBOs ability to provide effective capacity-building** | Identifying individuals in agency who are motivated and can be trained to train | “It is important to find someone that is serious about being part of the program, understands its goals... has been in the organization for a longer period”  
“We need people that are serious about being part of the program, because it helps to be invested in it. To understand what are the goals, the focus and be mindful of the core concepts.” |
|                                           | Including technology                   | “It would be easier if [CHWs] have recordings of sessions to practice before their initial training”  
“Include videos for the exercise trainers so they learn the exercise before, but I think we still need to make sure the person is doing it correctly in person” |
|                                           | More roleplay (CHW)                   | “More roleplays would be good to help people practice. They need to practice more.”  
“Sometimes [CHWs] get stuck so someone else can help clarify the situations and concepts so they deliver more eloquently if they practice in roleplays”  
“More roleplays would be good to make sure they understand the mindfulness CBT component, which is crucial” |
|                                           | Cultural adjustments                  | “Since Cantonese is a spoken language the questions we have to read in Cantonese sound mechanic, so more flexibility in the interpretations”  
“Let them talk about cultural stigma in the sessions because [Asian elders] come with a barrier to participate and if they talk about it they feel more empowered and accepted.” |
| **Having strategies to overcome financial obstacles** | Obtaining funds from the government or private sector to provide reimbursements | “I think about Medicare and some are Medicare/Medicaid so there could be a reimbursement for prevention.... Or United Healthcare reimburses local YMCAs for people they lift into diabetes prevention so maybe if we enroll a certain number of Medicare or Medicaid participants, [agencies] will get reimbursed at a certain level.”  
“The council in aging is connected to other senior centers so seeing how they could help out in terms of funding.”  
“We are working with a growing population, so I think the mayor of [site] would be interested in supporting the project and providing funding.” |
|                                           | Applying for other grants             | “I consider each organization should look for their own grants.”  
“I think we need to work to find sources of funding and write grants with help of partnering organizations”  
“there is potential for other grants... or test a more adapted version of the [intervention]”  
“If [partnering organizations] can prove that [PM-SB] works and people are going to get better and benefit from this, then I think that’s enough to continue the intervention [through grants].” |
|                                           | More flexibility with managing funds to adapt to local needs and improve compensation | “There needs to be more flexibility in terms of supporting staff and understanding the real costs of the intervention at the center because that would allow us to figure out how much it really costs the organization to staff someone onboard.” |
LIMITATIONS

This study has some limitations. Our findings are specific to the PM-SB program. However, our results are similar to other research that study barriers and facilitators to implement EBIs in CBOs, indicating that they help inform a broader understanding of the need to include staff’s perspectives when an intervention is transitioning from a research trial to the implementation phase (51, 57, 131). Most of the data presented comes from a two-month window from the January-February 2018 meeting. As such, some of the issues that prevailed may have been resolved, and others may have emerged in the final stages of the clinical trial. In-depth interviews had a 67% response rate from the sample of participants that completed the survey and focus groups. Since they volunteered to participate in the interview, there could be some self-selection that could potentially bias responses. However, the interview sample was representative of all the roles staff in the PM-SB study.

DISCUSSION

This is one of the few studies that focuses on staff’s perceptions of adaptations necessary to successfully implement an EBI in CBOs (51, 57, 135, 146) and, to our knowledge, the first to focus on mental health and physical disabilities in minority elders during a clinical trial. We find that staff’s perceptions on barriers and facilitators are consistent with issues that other CBOs have faced once EBIs have been already implemented, such as needing to adapt trainings, accessing funding and dealing with staff-turnover (51, 57). One of our key findings is that addressing staff’s perceptions of barriers and facilitators in an intervention while in the clinical trial stage can improve the intervention before the trial ends and before program implementation begins (130). Our findings also shed light on broader issues that affect CBOs in low-resource
settings. We focus our discussion on these issues and potential innovative solutions that can be integrated for adoption of the PM-SB in CBOs.

Consistent with previous research, our findings indicate the need to prevent staff-turnover by clarifying staff responsibilities and providing a supportive environment (152, 153). Existing research suggests that not seeing a clear path towards career advancement in community agencies is a solution for turnover in other intervention programs implemented in CBOs (153). In particular, young age and higher education along with job burnout are predictors of leaving the job altogether (154). To counter this issue, reducing role ambiguity (155) and creating job sequences that lead to promotion can be better systematized in CBOs (153). For example, intermediary positions such as leaders of particular roles (i.e. CHWs) or leaders of training can build upper-level positions that motivate staff to remain in their jobs (153). These roles can be designed to increase individual employee autonomy and involvement in decision-making that can impact job satisfaction. (156) Developing a culture that rewards mentorship and efforts by the staff when participants have positive results also increases retention (154). Further, using supervisors to actively participate in reflecting, problem solving and making decisions about strategies and cases fosters a supportive environment and prevents burnout (157), as well as other useful burnout prevention practices for staff in CBOs (156, 158, 159). These include: instituting trainings that foster coping skills such as cognitive behavioral therapy for practitioners (152), time off from work and peer-networks, among others (158)

Our findings suggest that integrating a train-the-trainer model with adaptations to the training tools and methods are perceived by PM-SB staff as a viable step to transition PM-SB from a research trial to implementation, which enhances their chances of adoption (135). Nonetheless, there are other factors that would need to be defined as the trial transitions to implementation,
such as establishing what agency or entity would be in charge of supervising trainings and ensuring staff is ready to train (151). This is especially important if the scalable implementation of the PM-SB includes paraprofessionals as providers, such as university students. Having sufficient supervision and professional guidance is crucial since paraprofessional staff might not have the background training to deal with sensitive mental health situations such as suicide risk (151).

Our findings show variability between how CBOs could maintain fiscal and structural health and implement the program effectively. An illustrative example is the differences we found in how staff were compensated depending on the agency they worked in. This is an important finding for implementation of EBIs in CBOs because it shows the challenging financial structures that some CBOs face as health providers in the health system (57). CBOs need better funding to ensure they are adequately compensating workers. Based on this study, we find that identifying committed staff that are willing and motivated to implement an EBI coupled with a CBO having sufficient funding to ensure they are adequately compensating workers are part of successful implementation. Yet, as CBOs are becoming important provider for prevention programs, more community and agency assessment tools are needed to identify CBOs that can be effective EBI providers (55).

Our study contributes to the literature by introducing strategies to provide financial support to CBOs. Staff offered helpful insight regarding strategies to overcome how financial obstacles can be overcome to fund PM-SB. There is potential for billing components of PM-SB through Medicare and Medicaid in accordance with interviewees suggestions (160). For example, the Medicare Diabetes Prevention Program (MDPP) is an intervention that targets Medicare beneficiaries that are pre-diabetic to improve their lifestyle and decrease their risk of chronic
disease. CBOs that participate in PM-SB are potential suppliers of prevention programs that could receive reimbursement for participants that are Medicare Plan B beneficiaries (160). Engaging local actors as suggested by staff also seems viable. The YMCA has a record of supporting chronic disease prevention programs, including MDPP, and has experienced staff such as exercise trainers (161). Other potential forms of billing are CHWs services that can be billed to Medicaid through the 1115 waiver and/or billing of CHWs as providers (162). Since PM-SB involves direct care with participants and counseling about their health, payment for CHWs services can be processed through a state plan amendment (SPA) (163). There are resources to train staff on billing third parties for prevention programs such as the National Association of County and City Health Officials’ (NACCHO) billing tool, a virtual tool that trains local agencies on how to bill for services (164).

As the intervention transitions from a research trial to implementation in CBOs, some staff members questioned the need for research assessments to be implemented if the intervention is already evidence-based, per the trial results. This highlights the “implementation gap” since data may not be to be ascertained once the EBI has been shown effective and it is being implemented. Yet, being a CBO that implements an EBI but is not collecting outcome data can lead to false inferences about the actual impact of an intervention at the population level, an ongoing challenge in the implementation science field (128).

Identifying what data needs to be collected for quality assessments and health-outcomes without spending large resources typical of a clinical trial requires an important adaptation to ensure an effective adoption of PM-SB (130, 165, 166). Defining if there will be practitioners at the CBO that are dedicated to data collection, such as RAs, or if this role can be integrated to others will be equally important. Similarly, although PM-SB was designed for elderly minorities
that have elevated mood disorder symptoms and some deterioration of physical functioning, determining if the program can service a wider elderly minority community that can still benefit from the intervention needs to be determined.

**CONCLUSION**

As CBOs continue to become important providers of prevention intervention programs for minorities, they face challenges to ensuring that effective interventions are adopted and maintained in CBOs once the trial ends. Our study contributes to closing this “implementation gap” by examining staff’s perceptions of factors that could lead to successful implementation. We identified what factors can facilitate implementation of this program in the intervention testing phase and how to overcome obstacles. Our findings suggest staff-identified turnover, limited time to perform responsibilities and financing can be potential challenges to implementation. However, opportunities to overcome financial obstacles and ways of integrating capacity building strategies to ensure program implementation, such as ensuring the availability of leadership roles, clarifying staff responsibilities, and providing a supportive environment are potential solutions to overcome these challenges. Integrating the perceptions of staff that provide EBIs in CBOs can provide insight into how to transform the intervention from a small trial to a permanent component of CBOs delivery model.
WORKS CITED


17. Rojas D, Diaz M. Providing Health Care to Undocumented Residents: Program details and lessons learned from three California county health programs.


22. Ime. Poblacion Mexicana en el Mundo (Mexican Population Abroad). Instituto de los Mexicanos en el Exterior (IME) [Institute for Mexicans Abroad].


72. USMLE. United States Medical Licensure Requirements 2008.


76. Daniels N, Sabin J. Setting limits fairly: can we learn to share medical resources?: Oxford University Press; 2002.


96. Zimmerman C. Undocumented immigrants, left out of health reform, likely to continue to grow as a share of the uninsured. Findings brief : health care financing & organization. 2011;14(9):1-3.


160. Services CfMaM. Medicare Diabetes Prevention Program (MDPP) Expanded Model.


164. Officials TNAoCaCH. Billing for Clinical Services. 2014.


SUPPLEMENTARY MATERIAL
## TABLE 1.1 Migrant Health Program

<table>
<thead>
<tr>
<th>General Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>To guarantee access to health services and protect the health of immigrants through binational actions in their places of origin, transit and destination.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specific Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Coordinate, support and monitor the various health related programs of the federal public administration that are carried out to benefit the Mexican immigrant population.</td>
</tr>
<tr>
<td>• Promote communication strategies and information regarding education and health promotion aimed at the Mexican immigrant population with cultural sensitivity.</td>
</tr>
<tr>
<td>• Promote and strengthen the binational relationship among health care providers to increase accessibility to health care of immigrants.</td>
</tr>
<tr>
<td>• Encourage and facilitate the management of binational agreements with governmental and nongovernmental organizations and academic institutions, which have the purpose to promote health and improve the access to and quality of health services aimed at the Mexican immigrant population.</td>
</tr>
<tr>
<td>• Provide medical care and hospital services to ill fellow citizens on both sides of the border.</td>
</tr>
<tr>
<td>• Foster the research related to the health of immigrants</td>
</tr>
</tbody>
</table>
Source: California Health Interview Survey (CHIS). Adults 19-64

FIGURE 2-S 1 Percentage of Private Non-group coverage in California
Source: California Health Interview Survey (CHIS). Adults 19-64

FIGURE 2-S 2 Percentage of Employer Based Insurance in California
Source: California Health Interview Survey (CHIS). Adults 19-64

FIGURE 2-S 3 Percentage of Medicaid/CHIP coverage by legal status in California
Source: California Health Interview Survey (CHIS). Adults 19-64

FIGURE 2-S 4 Percentage of Access to Usual Source of Care in California

Table 3-S 1 Participant characteristics for survey and focus groups during stakeholder meeting
<table>
<thead>
<tr>
<th>Role*</th>
<th># of Participants (N=30)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Leader</td>
<td>8</td>
</tr>
<tr>
<td>Community Health Worker</td>
<td>7</td>
</tr>
<tr>
<td>Exercise Trainer</td>
<td>4</td>
</tr>
<tr>
<td>Research Assistant</td>
<td>8</td>
</tr>
<tr>
<td>Other Research Team Member</td>
<td>5</td>
</tr>
</tbody>
</table>

**Length of time at current agency**

<table>
<thead>
<tr>
<th>Length of time</th>
<th># of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>8</td>
</tr>
<tr>
<td>1-3 years</td>
<td>17</td>
</tr>
<tr>
<td>3-5 years</td>
<td>2</td>
</tr>
<tr>
<td>5-9 years</td>
<td>1</td>
</tr>
<tr>
<td>10+ years</td>
<td>2</td>
</tr>
</tbody>
</table>

**Prior experience with research**

| Yes | 16 |

*One participant indicated more than one role (one CHW/RA/other research team member) Note. Table adapted from 2018 PM-SB Partnership evaluation.
Table 3-S 2 Participant characteristics for in-depth interviews

<table>
<thead>
<tr>
<th>Participants</th>
<th># of Participants (N=20)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Leaders/Program Coordinator</td>
<td>6</td>
</tr>
<tr>
<td>CHWs</td>
<td>5</td>
</tr>
<tr>
<td>Exercise trainers</td>
<td>5</td>
</tr>
<tr>
<td>Research Assistants</td>
<td>4</td>
</tr>
<tr>
<td><strong>Demographics</strong></td>
<td></td>
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<tr>
<td>Ethnicity</td>
<td></td>
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<tr>
<td>Asian</td>
<td>10</td>
</tr>
<tr>
<td>Latino</td>
<td>9</td>
</tr>
<tr>
<td>White</td>
<td>1</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>15</td>
</tr>
<tr>
<td>Male</td>
<td>5</td>
</tr>
<tr>
<td>Category</td>
<td>Code</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Barriers/Challenges</td>
<td></td>
</tr>
<tr>
<td>Barriers/Challenges</td>
<td>Infrastructure Challenge</td>
</tr>
</tbody>
</table>
| Barriers/Challenges | Capacity Building Challenge | Challenges related to training CHWs, exercise trainers and RA, includes internal challenges (within the sites such as not being able to train because of staff turnover, people not having sufficient time in their schedule to dedicate to the program) and external challenges (related to partnering organizations and other actors, like not finding skilled personnel to train). | “There is high turnover so difficult to train new staff (e.g. “It's actually kind of hard for us because we are also doing another part time thing”) (“A lot of our people we have now are doing their role in addition to their full time job”)
“The roleplay is not enough. It would be good to have more training to talk about the CBT” |                                                                          | cbch          |
<p>| | | | | | |
|                     |           |                                                                                                                                                                                                 |                                                                          |                                                                          |              |</p>
<table>
<thead>
<tr>
<th>Provider Challenge</th>
<th>Recruitment/Screening Process Challenge</th>
<th>Baseline and Follow up Challenge</th>
<th>CHW Challenge - Challenges related to the roles CHWs have including training and delivering PM sessions, includes internal challenges (within sites such as turnover) and external challenges (related to partnering organizations and other actors)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Challenges related to the design and implementation of the recruitment process (e.g. hard to find participants, people do not want to participate) and also screening process (i.e. people do not understand questions in the screening process, people are not motivated to take part in the screening process)</td>
<td>Challenges related to the design and implementation of baseline and follow-up after the screening process has ended. (e.g. the questionnaire is too long, people do not understand the questions, it is difficult to get to where the people are to do these interviews)</td>
<td>&quot;Some CHWs are not trained to treat suicide risk.&quot; &quot;We need more RAs&quot;</td>
</tr>
<tr>
<td></td>
<td>&quot;Hard to find participants that meet the eligibility criteria&quot;</td>
<td>&quot;Questionnaire is too long for a person of that age&quot;</td>
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<td></td>
<td>Collapsed Recruitment/Outreach with Screening</td>
<td>spch</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Provider Challenge</td>
<td>Baseline and Follow up Challenge</td>
<td>CHW Challenge - Challenges related to the roles CHWs have including training and delivering PM sessions, includes internal challenges (within sites such as turnover) and external challenges (related to partnering organizations and other actors)</td>
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<tr>
<td></td>
<td>&quot;Some CHWs are not trained to treat suicide risk.&quot; &quot;We need more RAs&quot;</td>
<td>&quot;Questionnaire is too long for a person of that age&quot;</td>
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<td>spch</td>
<td>bfch</td>
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<tr>
<td>Challenge Type</td>
<td>Description</td>
<td>Example Comment</td>
<td></td>
</tr>
<tr>
<td>----------------</td>
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<td></td>
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<tr>
<td>RA Challenge</td>
<td>Challenges related to the roles RAs have including training and delivering SB sessions, includes internal challenges (within sites, such as turnover) and external challenges (related to partnering organizations and other actors)</td>
<td>“There is a lack of leadership and a lack of understanding of the trial”</td>
<td></td>
</tr>
<tr>
<td>Leadership Challenge</td>
<td>Challenges related to the leadership needed to meet the goals of the trial (e.g., lack of skilled or motivated personnel to implement the trial)</td>
<td>“There is a lack of leadership and a lack of understanding of the trial”</td>
<td></td>
</tr>
<tr>
<td>Supervision Process Challenge</td>
<td>Challenges related to the design and implementation of the supervising process and the role of the supervisor. This includes internal challenges within the sites such as not having a supervisor and external challenges such as inconsistent feedback from the partnership.</td>
<td>“Sometimes people are not receptive to the supervisions”</td>
<td></td>
</tr>
<tr>
<td>Funding Challenge</td>
<td>Challenges related to obtaining funding for the program once trial ends, effective and efficient allocation of available funds, includes internal challenges (within the sites) and external challenges (related to partnering organizations and other actors)</td>
<td>“Because of the nature that things are supported, we don’t spend down as efficiently because there is a caseload issue or a hiring problem, so more flexibility on how to disperse the money would be great.”</td>
<td></td>
</tr>
<tr>
<td>Cultural Challenge</td>
<td>Challenges related to cultural barriers between the agencies and participants and/or the agencies with the partnering organizations/other actors (i.e. language barriers, cultural stigma, etc.)</td>
<td>“We need to include cultural stigma in the session because participants face that barrier”</td>
<td></td>
</tr>
</tbody>
</table>
### Facilitators/Strategies to adapt intervention

<table>
<thead>
<tr>
<th>Capacity Building Process</th>
<th>Comments about how training for CHWs, exercise trainers and RA needs to be adapted for adoption, includes internal Adaptation (within sites) and external Adaptation (partnering organizations and other actors)</th>
<th>&quot;People should continue to get their training through a 'train the trainer' model and then practice through role play&quot;</th>
<th>More helpful quotes: &quot;A way that would be easier would be to have recordings of a session so they can see it before they start the training&quot;(P1). &quot;They should videotape the person that trains in regards to how to do each of the sessions and the roleplay... It's 10 sessions and 1hr each and doing all the sample is going to take a lot of time out of the person that is training&quot; (P2)</th>
<th>cbp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recruitment/Screening Process</td>
<td>Comments about how recruitment and screening process needs to be adapted to become more effective and efficient, includes internal adaptation (within sites including both the RAs and CHW during the recruitment and screening process) and external adaptation (partnering organizations and other actors such as providing better incentives)</td>
<td>Do a shortened screening by phone now. So that gives us an option on how we can increase the number of screeners. So that way we can get more people (P2)</td>
<td>scpr</td>
<td></td>
</tr>
<tr>
<td>Supervision Process</td>
<td>Comments about how supervising process needs to be adapted for adoption to ensure people are on track so goal of the program can be reached, includes internal adaptation (within sites) and external adaptation (partnering organizations and other actors)</td>
<td>&quot;As supervisors we need to continue to identify areas that can improve and areas that need a refreshing course&quot;</td>
<td>Included Peer-Network as part of supervising</td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Intervention Process</td>
<td>Comments about how CHW sessions and exercise training sessions need to be adapted for the successful adoption of the model, includes internal adaptation (within sites such as adapting the session for the needs of those participants) and external Adaptation (partnering organizations and other actors such as needing a better manual for the sessions)</td>
<td>&quot;Some of the exercise training can be done at home so they can come in just two instead of three times&quot;</td>
<td>intpr</td>
<td></td>
</tr>
<tr>
<td>RA role</td>
<td>Specific strategies to Adapt other RAs in the program, maintain their commitment and motivation, includes internal Adaptation (within sites such as strategies to mitigate burnout and allow them to have more discretion about the recruitment/screening process) and external Adaptation (partnering organizations and other actors such as ensuring good communication)</td>
<td>RA should be allowed to decide when to continue interviewing</td>
<td>rahr</td>
<td></td>
</tr>
<tr>
<td><strong>CHW role</strong></td>
<td>Specific strategies to Adapt CHW role in the program, maintain their commitment and motivation, includes internal Adaptation (within sites) and external Adaptation (partnering organizations and other actors)</td>
<td>&quot;Finding passionate staff with some degree of experience in CBT&quot;</td>
<td>chwhr</td>
<td></td>
</tr>
<tr>
<td><strong>Exercise Trainers role</strong></td>
<td>Specific strategies to Adapt ET role in the program, maintain their commitment and motivation, includes internal Adaptation (within sites such as making sure they have the space and equipment they need) and external Adaptation (partnering organizations and other actors finding a way to pay them more)</td>
<td>&quot;Training is not difficult, but payment must increase&quot;</td>
<td>ethr</td>
<td></td>
</tr>
<tr>
<td><strong>Supervisor role</strong></td>
<td>Specific strategies to Adapt the supervisor's role in the program, maintain their commitment and motivation, includes internal Adaptation (within sites) and external Adaptation (partnering organizations and other actors)</td>
<td>&quot;Weekly or monthly calls with other supervisors is useful&quot;</td>
<td>suphr</td>
<td></td>
</tr>
<tr>
<td><strong>Obtaining Funds</strong></td>
<td>Comments on what can be done to adapt funding sources once trial ends, includes internal adaptation within sites such as building capacity so CBOs can write grants and external adaptation such as partnership engaging stakeholders to obtain funding.</td>
<td>&quot;Sites can write grants to help fund the intervention&quot;</td>
<td>obtfun</td>
<td></td>
</tr>
</tbody>
</table>

Other quote: "I think every organization will have to look for funding from local donors, I don't think they have to fund it on their own"
<table>
<thead>
<tr>
<th>Role of Partnership</th>
<th>Comments on the role that Partnership can take on to ensure adaptation is effective and follow the model, without continuing to be in charge of the project (e.g., Disparities Research Unit)</th>
<th>“I think there is potential for continuing to work together and for [DRU] to oversee what the sites do and provide the expertise they need to do the [PM-SB] successfully”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role of CBOs</td>
<td>Comments that pertain to adapting the CBOs for the intervention to continue once trial ends. These comments are specific adaptations within the CBO that MGH or other stakeholders were in charge of but will have to change. The code also includes strategies to foster community participation and engage local actors to adapt the intervention.</td>
<td>“[CBOs] will be in charge of hiring all the new people and identifying them” Other quote: “Find community centers that want to offer that kind of [exercise] training to their seniors”</td>
</tr>
<tr>
<td>Resource Allocation</td>
<td>Comments on adaptations in the allocation of funds at the site level to adopt intervention effectively and efficiently (i.e., paying personnel more) Comments on what can be done to cut down costs once trial ends, includes internal adaptation (within sites) and external adaptation (partnering organizations and other actors) such as to what degree is the research costs of the trial going to be reduced once the trial ends.</td>
<td>“There needs to be more flexibility in terms of supporting staff and understanding the real costs of the intervention at the center because that would allow us to figure out how much it really costs the organization to staff someone onboard.” Other quote: “Compensation is very, very low. I’m getting paid three times less than my regular job in this project(ET)”(P4)</td>
</tr>
<tr>
<td><strong>Government Collaborations</strong></td>
<td>Comments on strategies to integrate government collaborations and/or transforming program into a government sponsored initiative, includes internal adaptation (within sites) and external adaptation (partnering organizations and other actors) (i.e. Medicare, Medicaid, local governments)</td>
<td>&quot;We can talk to the Mayor and see if he is willing to invest&quot;</td>
</tr>
<tr>
<td><strong>Private Sector Collaborations</strong></td>
<td>Comments on strategies to adapt funding by integrating the private sector such as insurance companies and other stakeholders, includes internal adaptation (within sites) and external adaptation (partnering organizations and other actors) (i.e. insurance companies, YMCA, , etc.)</td>
<td>&quot;This could be a certified by Harvard program/product that is sold&quot;</td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td>Comments on how technology can be utilized to adapt the intervention efficiently and effectively</td>
<td>&quot;Videos could be made for the training and supervising&quot;</td>
</tr>
<tr>
<td><strong>Harnessing leadership</strong></td>
<td>Comments on strategies to motivate and identify personnel that will implement the intervention in the long-term, includes internal adaptations (within the site) and external adaptation (partnering organizations and other actors)</td>
<td>&quot;We really have to invest in people who are going to deliver the intervention and do it well&quot;</td>
</tr>
<tr>
<td><strong>Cultural adaptation</strong></td>
<td>Comments related to cultural barriers between the agencies and participants and/or the agencies with the partnering organizations/other actors (i.e. language barriers, cultural stigma, etc.)</td>
<td>&quot;We need to adapt the script that is in Cantonese because participants do not understand what we are saying and it sounds mechanic&quot;</td>
</tr>
<tr>
<td>Disparities</td>
<td>Comments related to disparities that the trial is addressing (e.g., raising aging population without access to treatment, disparities because of being ethnic minority)</td>
<td>&quot;Yes because right now most of the people in Puerto Rico are the elderly.&quot;</td>
</tr>
<tr>
<td>------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------</td>
</tr>
<tr>
<td>Following successful models</td>
<td>Comments that state the intervention (PM-SB) is working. These include comments about particular sessions, positive outcomes from elderly minorities, trainings are useful,</td>
<td>&quot;I know the intervention is working because I see the progress they make when they exercise&quot;</td>
</tr>
<tr>
<td>disp</td>
<td>mod</td>
<td></td>
</tr>
</tbody>
</table>