Policy Development: Proposing a Billing Model for Mobile Clinic Services

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Author Note

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Abstract

Practice Problem: Mobile health clinics were established to increase healthcare access to underserved, underinsured, and uninsured populations in rural and underserved areas. All the patients visiting this metropolitan mobile health clinic are uninsured and do not qualify for health insurance. Currently, the clinic relies on annual state funding, which is subject to variations and does not generate its own revenue. This poses a significant sustainability risk for the clinic. **Purpose:** This policy project aims to propose a billing model that not only supports the financial viability of the clinic but also benefits the local population. Additionally, the data collected on care delivery will be utilized to advocate for the value of nurse practitioners in terms of cost and health outcomes to legislators, insurance companies, and health organizations. **Method:** The policy project proposes four policy options, including maintaining the current billing process, implementing a fee-for-service model based on a sliding scale fee aligned with HRSA poverty guidelines, adopting a capitation billing model, or introducing a novel payment approach. The evaluation of these policies was conducted using the CDC Policy Analysis Key Questions and the CDC Policy Analysis Table, resulting in a ranking from the most to the least feasible option. **Result:** The fee-for-service sliding scale fee payment model stands out as the most feasible policy. A survey was administered to patients to assess how many could comfortably afford the predetermined fee, which was set at $40 per individual, based on HRSA poverty income guidelines. The survey results show that the majority of the patients will be able to afford the predetermined fee. This data will be presented to legislators and mobile clinic stakeholders, culminating in a proposal to implement the sliding scale fee structure as a means of generating revenue. **Conclusion:** The project findings support the implementation of the sliding fee for service policy as the most feasible option for generating revenue for the mobile clinic.

Policy Development to Proposing a Billing Model for Mobile Clinic Services

Problem

Mobile health clinics were established to enhance healthcare accessibility for underserved, underinsured, and uninsured populations residing in rural and underserved areas. These clinics offer an efficient means of delivering crucial healthcare services to at-risk populations. This is particularly important as certain illnesses and diseases tend to disproportionately impact specific demographics due to disparities in healthcare access and various social determinants of health. Many of these patients lack insurance coverage and are ineligible for enrollment in the Maryland Health Connection. This lack of coverage may be attributed to factors such as ineligibility for Medicare and Medicaid, immigration status, or employment situation, including self-employment or unemployment. In the United States, five to six million visits are facilitated annually through a fleet of 2000 mobile clinic vehicles (Aung et al., 2015). Notably, 60% of the patients utilizing mobile health clinics lack insurance coverage, while 31% rely on public insurance (Heath, 2018). According to Attipoe-Dorcoo & Delgado (2021), data derived from reported annual patient visits in a survey response indicated that the estimated annual operating cost per patient ranged from "$243 for preventive services to $65 for mammography/primary care/preventive delivery services," underscoring the significance of preventive care services as one of the most substantial offerings.

The value of mobile clinics lies in their adaptability and ability to reach the specific population they serve. These clinics are crucial in "eliminating barriers to access, reducing health disparities, and improving care delivery" (Aung et al., 2015). Most mobile clinics prioritize preventive and primary care, enabling them to identify at-risk patients and initiate timely interventions. This policy project will take place at one of three mobile health clinics. This

mobile clinic serves approximately 700 patients annually. While state funding is expected to continue, there is currently no grant funding, and the mobile clinics do not generate revenue. This lack of stable funding makes the mobile clinics vulnerable regarding sustainability. Implementing a billing model for services would benefit the patient population, ultimately improving care. Studies indicate that mobile clinic programs can yield significant cost-effectiveness, with potential "annual savings of up to $36 for every $1 invested compared to ER visits" (Attipoe-Dorcoo et al., 2020).

After constructing a fishbone diagram, a fundamental issue contributing to concerns about sustainability and the development of a billing model is the unpredictability of external funding and the absence of revenue generation (Figure 1). Furthermore, no data is recorded regarding the revenue-generating potential of nurse practitioners and outreach workers on the mobile clinic when services go unbilled. Capturing this data would provide leverage with legislators, insurance providers, and healthcare organizations, proving invaluable in demonstrating the value of nurse practitioners in terms of both cost-effectiveness and health outcomes.

Specific Aims

The primary issue this project aimed to address is the deficiency of revenue stemming from the mobile clinic's services. To sustain efforts in addressing the social determinants of health and narrowing the gap in health disparities, the proposition of a billing model will be pivotal for the mobile clinic's long-term viability. The establishment of a funding model for the mobile clinic will not only benefit the population being served but will also have positive implications for the broader healthcare system in the area by reducing emergency room and

hospital visits for conditions that could have been addressed earlier in alternative healthcare settings.

Available Knowledge

An evidence review was conducted, gathering relevant articles to support providing care for the underserved, underinsured, and uninsured patient population and to explore the importance of collecting data on the revenue-generating capacity of nurse practitioners' practices (Table 1). The retrieved evidence is categorized as level III (Liao et al., 2020), IV (Malone et al., 2020) and V (Hostetter& Klein, 2022; Brooks & Futon, 2017; Lewis et al., 2022; Dowd & Laugesen, 2020; Emanuel et al., 2021) with a B quality rating, including opinions from respected authorities, nationally recognized expert committees that appear to be credible, and consensus panels based on scientific evidence (Table 2).

The evidence demonstrated that safety net clinics and mobile clinics, which collectively serve seven million Medicare beneficiaries, are often overlooked in the development of alternative payment models (Hostetter & Klein, 2022). Additionally, the evidence indicated that implementing a payment model and algorithm allows for more accurate billing data, ultimately recognizing advanced practice providers as performing and billing providers (Brooks & Futon, 2017).

Malone et al. (2020) asserted that to advance health equity and reach the most vulnerable and disenfranchised populations, there is a need to increase investment in mobile clinics and other innovative approaches that promote preventive services. Drawing on evidence, Lewis et al. (2022) elaborated on the challenges of primary care and recommended strengthening the country's primary care system. Some areas for improvement included augmenting financial resources allocated to primary care, transitioning towards hybrid or capitated payment models in

addition to fee-for-services, and public health efforts. Dowd & Laugesen (2020) contended that the issue with current fee-for-service (FFS) payment lies not in compensating for each service but in the methodology used to determine the fees, while Liao et al. (2020) stated that implementing alternative payment models that encourage high-value care while holding providers accountable is a way to achieve a nationwide shift towards value-based payment.

The existing literature affirmed that mobile clinics are vital in delivering crucial preventive and primary care services to underserved populations. Additionally, it emphasized the challenge to the sustainability of mobile clinics due to insufficient revenue for the services rendered. The process goals for this policy project encompassed conducting an extensive environmental scan, performing a thorough policy analysis by identifying various policy options, making an informed policy selection, and formulating strategies for implementing the chosen policy. The outcome goal was to decide on the adoption of the proposed policy.

Framework

The Centers for Disease Control and Prevention (CDC) Policy Analytical framework (*Policy Analytical Framework*, 2013) expands on domains I, II, and III of the CDC's policy process: problem identification, policy analysis, and strategy and policy development. The framework aimed to improve the analytic basis for identifying and prioritizing policies that can improve health and the strategic approach to identify and further adopt policy solutions. This framework had three key steps: identifying the problem or issues, identifying an appropriate policy solution (identifying and describing policy options, assess policy options, prioritize policy options), and developing a strategy for furthering the adoption of a policy solution.

The initial phase of this framework entailed recognizing the imperative for ensuring sustainability of the mobile clinic alongside acknowledging the indispensable role of nurse

practitioners. Subsequently, the second phase encompassed a meticulous examination to pinpoint the most advantageous policy option for both the patient population served by the mobile clinic and the clinic itself. This comprehensive assessment involved delving into existing literature on mobile clinics, appraising the significance of nurse practitioners in outpatient care, exploring available billing methodologies, and conducting an exhaustive environmental scan to gain insights into the operational landscape of the mobile clinic's service areas. Concurrently, various policy options were rigorously evaluated, juxtaposed against one another, and then prioritized based on their efficacy and feasibility.

In the third phase, a series of strategic initiatives were devised to facilitate the adoption of the identified policy option. This involved addressing operational intricacies such as jurisdictional consideration and delineating information essential for policy selection. Additionally, the findings of the policy analysis were communicated to pertinent stakeholders, fostering a collaborative approach towards advancing the chosen policy agenda.

Methods

Context

The site for this policy project was a mobile clinic in a metropolitan area. This mobile clinic offered preventive and primary care services to the underinsured, uninsured, and immigrant populations in underserved areas. These patients were ineligible for government health assistance programs like Medicare and Medicaid due to factors such as immigrant or employment status, including self-employment or unemployment. The mobile clinic was dedicated to breaking down barriers to health access, reducing disparities, and enhancing healthcare delivery for these specific patient groups.

Funding for this mobile clinic came from state allocations and grants, amounting to $500,000 annually. However, this amount alone was insufficient to sustain the operations of the mobile clinic. The funding was allocated towards various needs such as operation and maintenance of mobile trucks, procurement of supplies and equipment, and payment of staff wages (Figure 2). The project site director, the patient receiving care, state representatives, and the nurse practitioners working on the mobile clinic were key stakeholders involved at this site. The culture and atmosphere within the project site were conducive to the development of a billing model for services. The initiative was seen as essential in ensuring the continued sustainability of the clinic, and a conclusion was drawn after conducting an interview with the site director.

While the clinic does receive state funding, these funds were primarily allocated for equipping three mobile trucks. The clinic also applies for grants, which may be approved or denied. When granted, the requested amount was transferred, and a comprehensive report was submitted detailing the proposed budget (Figure 2). According to Attipoe-Dorcoo et al. (2020), the estimated annual cost of operating a mobile clinic program for preventive and primary care falls within the range of $479,000 to $822,000. The specific operating cost for a mobile clinic amounts to $650,000. Currently, the prevailing process at the clinic entails providing care to patients without associated charges. They receive treatment and are referred to specialized doctors and services as necessary. There is no payment agreement between the clinic providers and the patients.

Intervention

The intervention for this policy project involved applying the CDC Policy Process to propose a funding policy to sustain this mobile unit. This process included problem

identification, policy analysis, strategy and policy development, policy enactment, and policy implementation (CDC, 2013). The project took place over 15 months, excluding policy enactment and implementation due to time constraints. The timeline included identification, approval, planning, implementation, evaluation, and dissemination phases. The desired process for the policy development was to present four billing models for services provided by the mobile clinic. The implementation team included the project author, the project site director, and one outreach worker. Weeks 1-3 were committed to policy proposal, and weeks 4-8 were focused on utilizing the CDC data collection tools of Analysis Key Questions and Analysis Scoring Criteria Table.

An environmental scan was conducted using the CDC's Key Questions, addressing policy framing, health impact, and the feasibility of policy adoption and implementation (CDC, 2013). Following the environmental scan and identifying the four policy options, quantitative and qualitative methods were employed to assess these options' effectiveness, efficiency, and feasibility. The policy processes were carried out in collaboration with the site director and an outreach worker on the mobile unit.

To achieve the aim of this project, several strategies and tactics were employed across several key categories that included accountability, buy-in, collaboration, communication, structural changes, data management, and education. Accountability measures involved actively seeking and utilizing the director's feedback and securing formal commitments. This was achieved by seeking verbal consent from the director on specific contributions to policy implementation. Securing buy-in for the policy entailed accessing existing funds to support its implementation, establishing a fee-for-service structure aligned with Health Resource Services Administration (HRSA) guidelines, adjusting the policy survey template to the clinic population,

and exploring available payment approaches. Collaboration efforts engaged the director and outreach worker in the implementation process. This included actively recruiting and nurturing relationships with these stakeholders.

Effective communication was maintained through regular weekly meetings with the director of the mobile clinic virtually and through email. Further guidance is continuously sought from the director, leveraging her expertise as the subject matter expert on the policy proposal and its implementation. Data was collected through readiness assessments, identifying barriers and facilitators, local needs assessments, and stakeholder engagement.

Measure

The structure goal formulated four policy options, including continuing the current billing process at the mobile clinic, establishing a fee-for-service model of a sliding scale fee based on HRSA poverty guidelines, following the capitation billing model, or establishing a new payment approach. The initial policy aimed at providing patient care irrespective of revenue generation. The second policy involves a Sliding Scale Fee for Service, a conventional payment model where providers receive reimbursement according to the quantity of services rendered with payments made on a per-service basis. The sliding scale fee for service would create an incentive for providers to offer more services, which would translate into additional revenue (Koenecke, 2019). With this billing model, patients have the flexibility to choose the services they receive, and providers are compensated accordingly (Koenecke, 2019). The third policy, the capitation model, entailed a fixed payment per patient within a specified time frame rather than per service. In the capitation billing model, providers are paid a predetermined amount, encouraging cost-effectiveness as providers aim to manage their patients' health efficiently within the fixed

amount (Koenecke, 2019). Implementing the fourth policy would necessitate revisiting and exploring alternative billing approaches.

The process goal for the four proposed policies was measured using the CDC Policy Analysis Key Questions, addressing impact risk factors, quality of life disparities, morbidity, and mortality for all four policies (Appendix B). The site director and the project lead responded to the questionnaire and recorded them in REDCap, password-protected for enhanced security. These proposed policies, constituting the structural framework, were developed, and their success was determined by adopting a policy at the conclusion of the implementation period, marked by an assessment of 'yes' or 'no.' The outcome goal for this project was the acceptance of one of the proposed policies and subsequent policy implementation with the director's support.

Collaboration involved the site director in implementing efforts while focusing on recruiting and cultivating relationships with various stakeholders and the clinic. The outreach worker assisted mobile clinic patients with the sliding scale fee survey. The project lead worked closely with one key stakeholder- the director. Despite the initial plan for weekly communication and seeking further guidance from the stakeholder as the subject matter expert on the policy proposal and implementation, the director's commitment to training new staff at the mobile clinic limited meetings, though they remained ongoing. Throughout the implementation period, educational efforts persisted. Continuous information was shared with the director to ensure ongoing support for the billing model is sustained.

The policy process consisted of problem identification, policy analysis, strategy, and policy development (CDC, 2013). Due to time constraints, policy enactment was not a part of this project. The project timeline encompasses identification, approval, planning,

implementation, evaluation, and dissemination. Data collection procedures involved engagement through the use of CDC policy analysis key questions and an analysis table.

The project lead convened with the director, utilizing the CDC data collection tool to analyze each proposed policy and evaluate their health impact, feasibility, and economic and budgetary implications. No patient identifiers were collected during this meeting. To mitigate project data risks, measures were taken to prevent unauthorized access by electronically entering data into the HIPAA-compliant and password-protected server, REDCap. The server is accessible to clinical site representatives, sponsors, and project faculty.

Ethical Consideration

Non-human Subject's Research determination from the Human Research Protection Office (HRPO) of the UMSON Institutional Review Board (IRB) was obtained prior to the implementation of this DNP project. Since this project did not involve human testing, all participants are protected by HIPAA. The project followed the standards of care for practice at the University and adhered to the University policies and procedures. All information collected was stored in REDCap, password-protected and encrypted to prevent unauthorized access. Access is restricted to authorized personnel. The project had no potential conflicts of interest or ethical implications to report.

Results

Analysis

The data generated for this policy process employed qualitative and quantitative methods to decide and analyze policy options. Quantitative measures were gathered utilizing the CDC scoring criteria to guide policy evaluation. The qualitative data were generated through an environmental scan using the Key Questions. The analysis of qualitative measures served to

justify a policy choice. The analyses were ranked from the most to the least favorable, aiding in determining the most feasible option. The rank for policy adoption considered impact level, feasibility, and economic and budgetary impact (Appendix B). Additionally, the climate and culture of the project site were considered when making policy choices.

Result and Analysis

Data collection was achieved through readiness assessments and identifying barriers and facilitators. This involves conducting local needs assessments and engaging stakeholders. After employing the CDC data collection tools, the Policy Analysis Key Question and Analysis Table, the sliding scale fee-for-service policy emerged as the most favored option among the four proposed policies. It was followed by the capitation model, with the exploration of alternative billing approaches ranking third, the continuation of the current process of providing services without generating revenue being the least preferred option.

The framing questions from the Policy Analysis Key Question indicated that the sliding scale fee-for-service policy falls under an administrative level that will be implemented and enacted by the university associated with the clinic. Enforcement of this policy will be essential, with the local clinic board members tasked with its administration requiring state-level approval. The primary goal of this policy was to establish a billing model for service at this mobile clinic. Furthermore, compared to other proposed policies, this approach appeared more feasible and promising in generating revenue for the clinic.

Utilizing the CDC Policy Key Questions, the feasibility of implementing a capitation model was deemed impractical. This is primarily due to the necessity of extensive collaboration between the clinic, insurance companies, and the patient population served by this clinic, who predominantly lack insurance coverage. In evaluating economic and budgetary impacts, it is

apparent that this policy would expose the clinic to heightened financial risks should the services offered exceed the capitation payment.

The Sliding Scale Fee-for-Service patient survey process involved determining and establishing appropriate fees per poverty level by engaging the mobile clinic director (Appendix D). Considering the amounts charged by similar clinics in the area, a fee of $40 was established as the minimum for individuals with an annual federal poverty level less than 100 percent ($10,000 to $30,000), based on the HRSA poverty guideline. A 10 percent increment was then added to this amount. For those with a poverty level between 100 to 150 percent, the charge was set at $44; for a level of 150 to 200 percent, it will be $48; for poverty levels over 200 percent, the fee will be $52 (Appendix C).

To address the public impact of the Sliding Scale Fee-for-Service model, this policy aimed to sustain the clinic's work and leverage its revenue-generating capacity to garner support from legislators and other stakeholders. Upon closer examination of the public health impact, there is no intended negative consequence, as patients who are unable to pay will still receive treatment. In looking into the economic and budgetary impacts of the sliding scale model, this policy will incentivize provider productivity and enhance care delivery. It is expected to contribute to the clinic's return on investment, demonstrating that the benefits of implementation outweigh the costs.

The sliding scale fee is supported by the HRSA Bureau of Primary Health Care, which is responsible for effectively and efficiently overseeing health centers in medically underserved communities. The collection tools encompassed both qualitative and quantitative data. A run chart and a pie chart were obtained to visualize and determine how many patients could afford the predetermined amount based on the HRSA poverty income guidelines (Appendix C, F & G).

Some obstacles impeded data-gathering efforts, such as rescheduled meetings due to the stakeholder's additional responsibilities and commitments to the clinic. Another challenge arose due to opposition from the clinic's legal team in drafting a billing model for services. Furthermore, the sliding scale fee survey was modified to simplify and eliminate potential patient identifiers, which delayed survey collection.

Discussion

In assessing the impact of public health, implementing the sliding scale fee-for-service model has no intended negative consequences. Patients who cannot pay will continue to receive essential treatment, underlining the clinic's commitment to equitable care. Delving into the economic realm, adopting this policy is expected to act as a catalyst for provider productivity, ultimately enhancing the overall delivery of care. In terms of financial analysis, it becomes apparent that the implementation of the sliding scale model is poised to significantly contribute to the clinic's return on investment, with the benefits outweighing the associated costs. In alignment with the HRSA poverty income guideline, the income levels of the population able to afford the predetermined amount were in line with initial expectations.

The anticipated outcomes included acquiring a sufficient number of surveys to demonstrate robustly the affordability of the predetermined fee. However, several factors limited data collection, such as the delayed survey collection due to the low volume of patients seen during the initial week of implementation. It is important to acknowledge the project's limitations in determining the predetermined fee, including the lack of consideration for patient demographics such as age. Additionally, the fee determination did not account for the full extent of primary care services required per patient visit.

Conclusion

Efforts are underway to solidify a sustainability plan that ensures the continued success of the sliding scale model. This includes ongoing provider productivity assessments, regular fee structure reviews to align with the clinic's financial goals, and community outreach initiatives to broaden access to affordable care. Implementing the sliding fee-for-service policy approach shows great promise in ensuring the sustainability and ongoing accessibility of healthcare services for underserved populations. With this approach, there are no intended negative consequences, as patients unable to pay will receive the necessary treatment.

One of this project's notable strengths lies in its potential return on investment, supporting the implementation of the Sliding fee-for-service policy as a feasible option for generating revenue. Looking ahead, a dedicated DNP student and research assistant is actively developing a business plan and preparing a grant application. This student is committed to sharing the project results and data with various stakeholders. The student intends to propose the sliding scale fee structure to generate revenue, ensuring the long-term sustainability of this policy project and its implications for future Quality Improvement initiatives.

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Table 1

Evidence Table

Citation: Hostetter, M., & Klein, S. (2022, January 19). *The perils and payoffs of alternative payment models for Community Health Centers*. Commonwealth Fund. Retrieved March 23, 2023, from https://www.commonwealthfund.org/publications/2022/jan/perils-and-payoffs-alternate-payment-models-community-health-centers					**Level: V**
Purpose/Hypothesis	**Design**	**Sample**	**Intervention**	**Outcomes**	**Results**
Community health centers or federally qualified health centers (FQHC) which are 1400 safety net clinics that provide care to all regardless of their ability to pay are often not considered in the designs of alternative payment model (APM) even though they provide care to one in six Medicaid clients and seven million Medicare beneficiaries.	Expert Opinions	-Yakima Valley Farm Workers Clinic: 42 clinics. -Mosaic Medical:15 clinics in central Oregon -AltaMed Health Service: 43 clinics -Iowa primary care association: 11 health centers -Providence community health centers-8 medical clinics	The prospective payment system (PPS) was intended to shore up federally qualified health centers financing by accounting for additional services health centers provide to what are often high-need patients. This current model doesn't reflect the change and complexity in the nature of care or the magnitude of poverty and roles of trauma and the social determinants of health.	-State and federal funds leveraged -Data analytics	-Large health centers like AltaMed have taken a portfolio approach to APMs, gradually shifting into contracts that hold them accountable for their Medicaid, Medicare, and dually covered patients. -But such an approach leaves out the uninsured, forcing health centers to rely on grant funds and additional revenue from APMs to meet their needs. -The uninsured are still getting left outs -Achieving a cohesive, multiplayer approach to FQHC payment that brings down spending will require greater cooperation among providers, payers, and policymakers.

					-Primary care is the backbone of an efficient health care system,"

Citation: Brooks, P. B., & Futon, M. E. (2017, July 1). *Demonstrating advanced practice provider value: Implementing a new advanced practice provider billing algorithm*. Policy/Scope of Practice - Demonstrating advanced practice provider value: Implementing a new advanced practice provider billing algorithm. Retrieved March 23, 2023, from https://journals.lww.com/jaanpresourcecenter/Pages/demonstratingap.aspx					**Level: V**
Purpose/Hypothesis	**Design**	**Sample**	**Intervention**	**Outcomes**	**Results**
To develop a simplified billing algorithm that is standardized across the institution for Advanced practice provider (APPs) and their attending physician partners following Medicare/Medicaid/third party payer guideline -To develop an algorithm that would direct APPs to either bill using their own NPI, unless the attending physician also participate in a split visit encounter -To align revenues and cost for more informed decision making and to create cash on hand for outreach expansion.	-QI project	1 large academic medical center	-Educational roll out- multiple mandatory education sessions for the APPs by the Directors of Advanced Practice -Recorded presentation place in the campus-wide learning management system that provides compliance training. -Compliance monitor on weekly basis for 6 weeks.	-A new billing algorithm was implemented on July 1, 2017, and outcomes were evaluated 12 months after implementation. -The new APP billing algorithms allowed for the capturing of more accurate billing data to recognize APPs as performing and/or billing providers. - This project uncovered the work already performed by APPs while increasing relative value units, collections, and overall patient encounters by the APP/physician team.	- APP billing algorithm was built while following updated practice laws, compliance/legal standards, and hospital bylaws/regulations - Compliance performed audits, after 5 weeks the error rate decreased 36% -Comparison from baseline after 12 months, there was statistical significance from 2017 to 2018. -Findings suggest improved utilization and appropriate attribution of productivity. -APP algorithm drives increased opportunities to access care through

					improved workflow efficiencies

Citation: Malone, N. C., Williams, M. M., Smith Fawzi, M. C., Bennet, J., Hill, C., Katz, J. N., & Oriol, N. E. (2020, March 20). *Mobile Health Clinics in the United States - International Journal for Equity in health*. BioMed Central. Retrieved March 25, 2023, from https://equityhealthj.biomedcentral.com/articles/10.1186/s12939-020-1135-7					**Level: IV**
Purpose/Hypothesis	**Design**	**Sample**	**Intervention**	**Outcomes**	**Results**
To describe the mobile health sectors in the U.S including the patients, services, organizational structures, and funding sources.	Qualitative Study	811 clinics	Using the median number of annual visits (3491) and the estimated 1500 to 2000 mobile clinics nationwide, we estimate 5.2 to 7.0 million visits to mobile health clinics each year. Assuming the lower estimate of 5.2 million visits, there are an estimated 2.1 million visits by uninsured persons, 2.3 million visits by publicly insured persons, and 2.1 million visits by children to mobile health clinics.	-Affiliations and funding sources -Client demographics -Services offered -Geographic distribution	-Mobile clinics provide a median number of 3491 visits annually. More than half of their clients are women (55%) and racial/ethnic minorities (59%). -Of the 146 clinics that reported insurance data, 41% of clients were uninsured while 44% had some form of public insurance. -The most common service models were primary care (41%) and prevention (47%). With regards to organizational affiliations, they vary from independent (33%) to university affiliated (24%), while some (29%) are part of a hospital or health care system.

					-Most mobile clinics receive some financial support from philanthropy (52%), while slightly less than half (45%) receive federal funds.

Citation: Lewis, C., Horstman, C., & Ramsay, C. (2022, August 5). *Evidence-based strategies for strengthening primary care in the U.S.* Commonwealth Fund. Retrieved March 30, 2023, from https://www.commonwealthfund.org/blog/2022/evidence-based-strategies-strengthening-primary-care-us.					**Level: V**
Purpose/Hypothesis	**Design**	**Sample**	**Intervention**	**Outcomes**	**Results**
To address the challenges of strengthening primary care	-Expert opinion	N/A	• **Strategy 1**: increase financial investment in primary care. • **Strategy 2**: Shift to hybrid or capitated payment approaches • **Strategy 3:** Support integration of primary care with behaviors health, social services and public health	-Strengthening primary care - Taken together, these evidence-based changes would close critical gaps in our health care system, better prepare primary care to respond to future public health crises, and enable comprehensive, high-quality primary care.	N/A

Citation: Liao, J. M., Navathe, A. S., & Werner, R. M. (2020, April). *The impact of Medicare's alternative payment models on the value of…* ANNUAL REVIEWS. Retrieved April 9, 2023, from https://www.annualreviews.org/doi/10.1146/annurev-publhealth-040119-094327					**Level: III**
Purpose/Hypothesis	**Design**	**Sample**	**Intervention**	**Outcomes**	**Results**
To synthesize evidence that demonstrates the effect population-based and episode-based payment reforms on clinical, quality, utilization and cost outcomes while also	Systematic Review	7 payment models	**Population-based payment models:** • **The pioneer model**: engages leading organizations with the ability to assume population-level quality and cost accountability via two-sided risk at a time. ○ Participation in the Pioneer program was associated with 1.9% and 4.5% differential decreases in the	N/A	Unintended consequences of these payment models includes health care disparities, and procedural volume increase. Implementation of population and episode based models have been associated with modest reduction in

reviewing data about unintended consequence under both alternative payment model (APM) types.			utilization and spending on low-value services as compared to non-participating organization. • **The Medicare Shared Savings Program and ACO Investment Model (MSSP):** evidence suggests that MSSP has contributed to reduction in Medicare spending. A concern surfaced that certain participant, such as small ACOs operating in rural locations would face significant challenges investing in infrastructure and processes needed to manage populations and succeed under population based incentives. • **The Next Generation ACO Model (NGACO)**: designed to emphasize greater financial accountability-and in turn, the opportunity for greater risk and reward-among participants organizations. There is little available evidence that NGACO affects clinical quality or spending outcomes. • **The Comprehensive Primary Care Program**: a multi-payer model that provided participants with an average of $15-20 per beneficiary per month care management payment and required participants to focus on 5 strategies related to comprehensive primary care. o Risk-stratified care management o Access and continuity o Planned care for chronic conditions and preventive care o Engagement of patients and caregivers o Coordination of care across the medical neighborhood. CPC incorporated financial incentives by allowing participants to share any financial savings, net of care management fees with Medicare. There is no associated changes in quality, patient experience or Medicare spending.		Medicare spending without major compromise in the quality of care.

			Episode-Based Payment Models • **The Acute Care Episode Demonstration**: found to not be associated with changes in 30 days Medicare spending or mortality but was associated with decreases in PAC spending after both orthopedic and cardiac surgery. • **The Bundled Payments for Care Improvement Initiative:** exploratory survey suggest BPCI patients may have had greater improvement in some measures of functional status compared to patient from nonparticipating hospital • **The Comprehensive Care for Joint Replacement Model.**		

Citation: Dowd, B. E., & Laugesen, M. J. (2020, August). *Fee-for-service payment is not the (main) problem*. Health services research. Retrieved May 7, 2023, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7375993/					**Level: V**
Purpose/Hypothesis	**Design**	**Sample**	**Intervention**	**Outcomes**	**Results**
To understand the effect of physician incentives on the allocation of healthcare resources	Expert opinion	N/A	Two pricing approaches, reference pricing and tiered cost sharing combined improved consumer information and strong financial incentives within a fee for service payment system. Refence pricing will let physicians set their own fee for specific services or for Relative Value unit (RUV) multipliers.	Physician payment incentives	The problem with fee for service is not paying a fee for each service but the way the fees are determined. Physicians that maintain patient's health at lower cost are financially penalized. In the future they will need to be rewarded with greater patient volume, taken from their less efficient competitors.

Citation: Emanuel, E. J., Mostashari, F., & Navathe, A. S. (2021, May 25). Designing a successful primary care physician capitation model - ct.gov. https://portal.ct.gov/-/media/OHS/Primary-Care-and-Community-Health-Reforms/Primary-Care-Subgroup/2021-Meetings/8-24-21/jamaemanuel2021vp210045162161728164068-1pdf-primary-care-capitation.pdf					**Level: V**
Purpose/Hypothesis	**Design**	**Sample**	**Intervention**	**Outcomes**	**Results**
To develop seven additional designs elements that are important for a successful PCP capitation initiative.	Expert opinion	N/A	1. Capitation should increase primary care payments and not be a mechanism to reduce payment to PCPs. 2. Capitation contracts should be long-term. 3. PCP capitation should not apply to every service but be used primarily for the most common evaluation and management codes, such as code 99213, for mid-level outpatient office visits for established patients. 4. Fee-for-service payments should be maintained for a small number of specific services that are proven to improve quality, access, and costs. These could include immunization, referral management, patient visit within 7 days of an ER visit or hospital discharge, systematic medication holiday to reduce unnecessary polypharmacy. 5. To align the interests of payers and PCPs, capitation should be linked to substantial incentives to improve value by restraining total cost of care and improving quality. 6. PCPs need incentive to engage patients to be assigned to their patient care panels. 7. Financial considerations should not be the only factor in redefining the payer-PCP relationship.	N/A	Capitation will not be able to eliminate coding and claims until quality and utilization reports can be extracted from electronic health records. PCPs capitation can eliminate many aspects of utilization management. Adopting these seven design elements could be a path forward to help ensure development of a feasible and successful PCP capitation model. A model that combines primary care capitation with accountability for total cost of care and higher quality could help correct many of the inadequacies of FFS, build on the lessons of earlier experiments in primary care capitation, and accelerate the recent

					move to value based payment.

Table 2

Evidence Synthesis Table

Project Title: **Policy Development to Establish a Billing Model for Mobile Clinic Services**			
JHNEBP Model Level	**Total Number of Sources**	**Author and Quality Rating of each study**	**Synthesis of Findings**
Level 1 Experimental study · Randomized Controlled Trial (RCT) · Systematic review of RCTs with or without meta-analysis			
Level II Quasi-experimental studies · Systematic review of a combination of RCTs and quasi-experimental studies, or quasi-experimental studies only, with or without meta-analysis			
Level III Non-experimental study · Systematic review of a combination of RCTs, quasi-experimental, and non-experimental studies, or non-experimental studies only, with or without meta-analysis · Qualitative study or systematic review of qualitative studies with or without meta-synthesis	1	• Liao et al., 2020: B	-Liao et al. (2020) stated that a way to achieve a nationwide shift toward value-based payment is to implement alternative payment models that encourage high-value care while holding providers accountable financially for quality and cost of care. Additionally, the study found associated reduction in Medicare spending without compromising quality of care.
Level IV Opinion of respected authorities and/or reports of nationally recognized expert committees/consensus panels based on scientific evidence	1	• Malone et al., 2020: B	-Malone et al. (2020) explained that to advance health equity and reach the most vulnerable and disenfranchised populations, there needs to be an increase in investment in mobile clinics and other innovative ideas that promote preventive services.
Level V Evidence obtained from literature reviews, quality improvement, program evaluation, financial evaluation, or case reports · Opinion of nationally recognized expert(s) based on experiential evidence	5	• Hostetter & Klein, 2022: B • Brooks & Futon, 2017: B	-Hostetter & Klein (2022) emphasized that patients' safety net clinics and mobile clinics are often not considered in the designs of alternative payment models even though they provide care to seven million Medicare beneficiaries.

		• Lewis et al., 2022: B • Dowd & Laugesen, 2020: B • Emanuel et al., 2021: B	-Brooks & Futon (2017) showed that establishing a payment model and algorithm allowed for capturing more accurate billing data to recognize advanced practice providers as performing and as billing providers. -Based on evidence findings, Lewis et al (2022) elaborated on primary care challenges and suggestions to strengthen the country's primary care. Some areas to strengthen primary care include increasing financial investment in primary care, shifting to hybrid or capitated payment approaches along with fee for service payment and supporting the integration of primary care with behaviors health, social services, and public health. -Dowd & Laugesen (2020) described that the problem with current fee-for-service (FFS) payment is not paying a fee for each service but how the fees are determined. Based on the literature findings, there is enough evidence to support the notion that mobile clinics provide essential preventive and primary care services to underserved populations. Literature also points out the threat to mobile clinic sustainability due to a lack of revenue. Emanuel et al. (2021) elaborated that the adoption of primary care capitation is now more than ever viewed as an answer to the problem of affordability, coverage, patient experience, and quality of the U.S health system. The authors emphasize seven additional design elements that may be important to a successful PCP capitation initiative.
Overall Quality Rating w/rational and Recommendation: B, the majority of the evidence were qualitative opinions of respected authorities, and they are reports of nationally recognized experts based on evidence. Good and consistent evidence to support policy development for billing model for services at the mobile clinic			

Figure 1

Fishbone Diagram

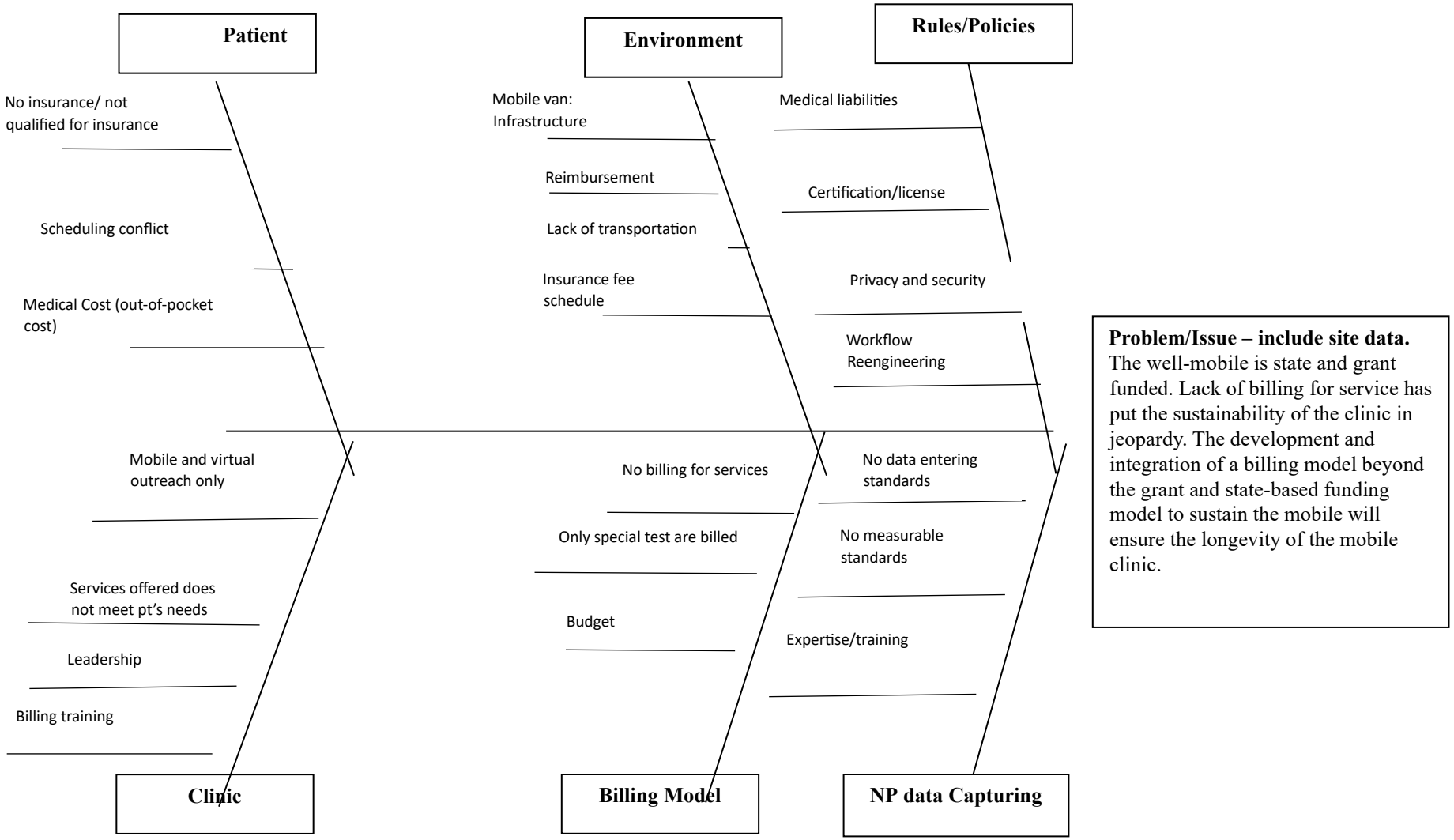


Figure 2

Flowchart of the Current Process Map

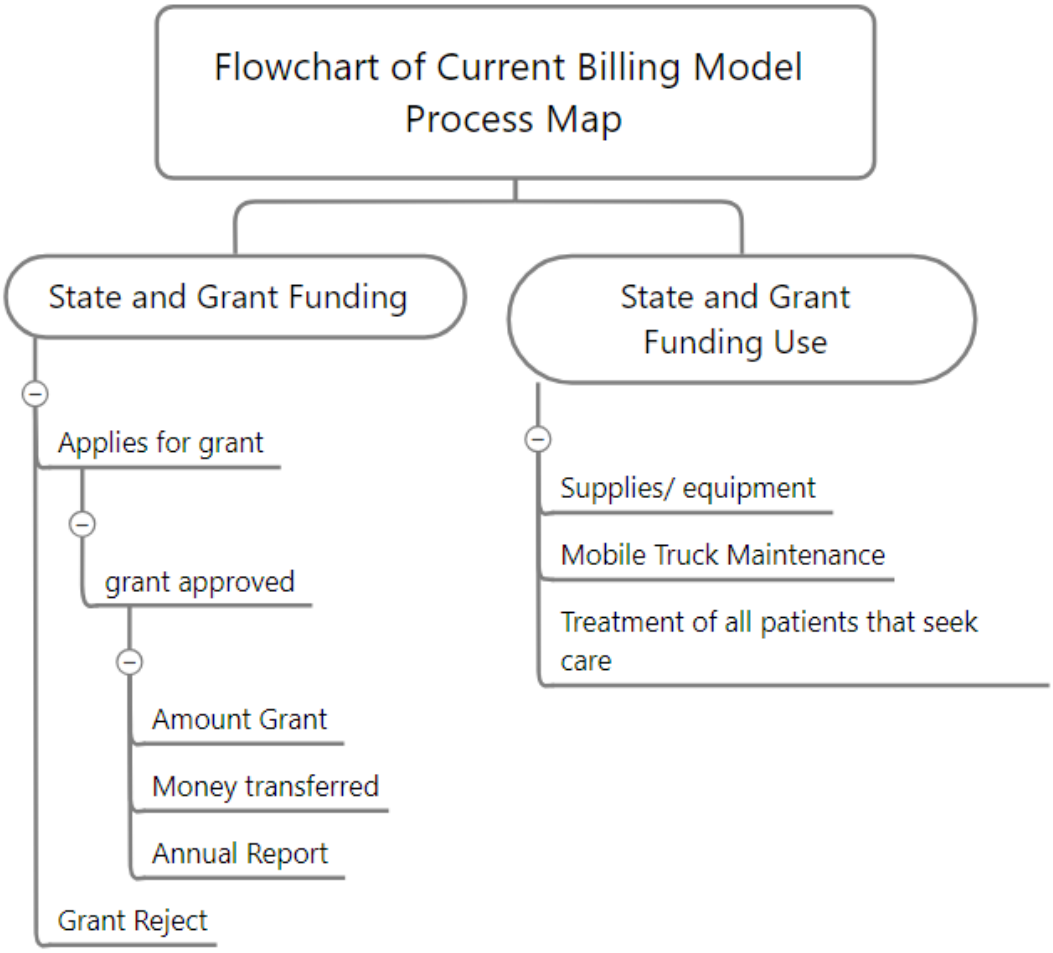
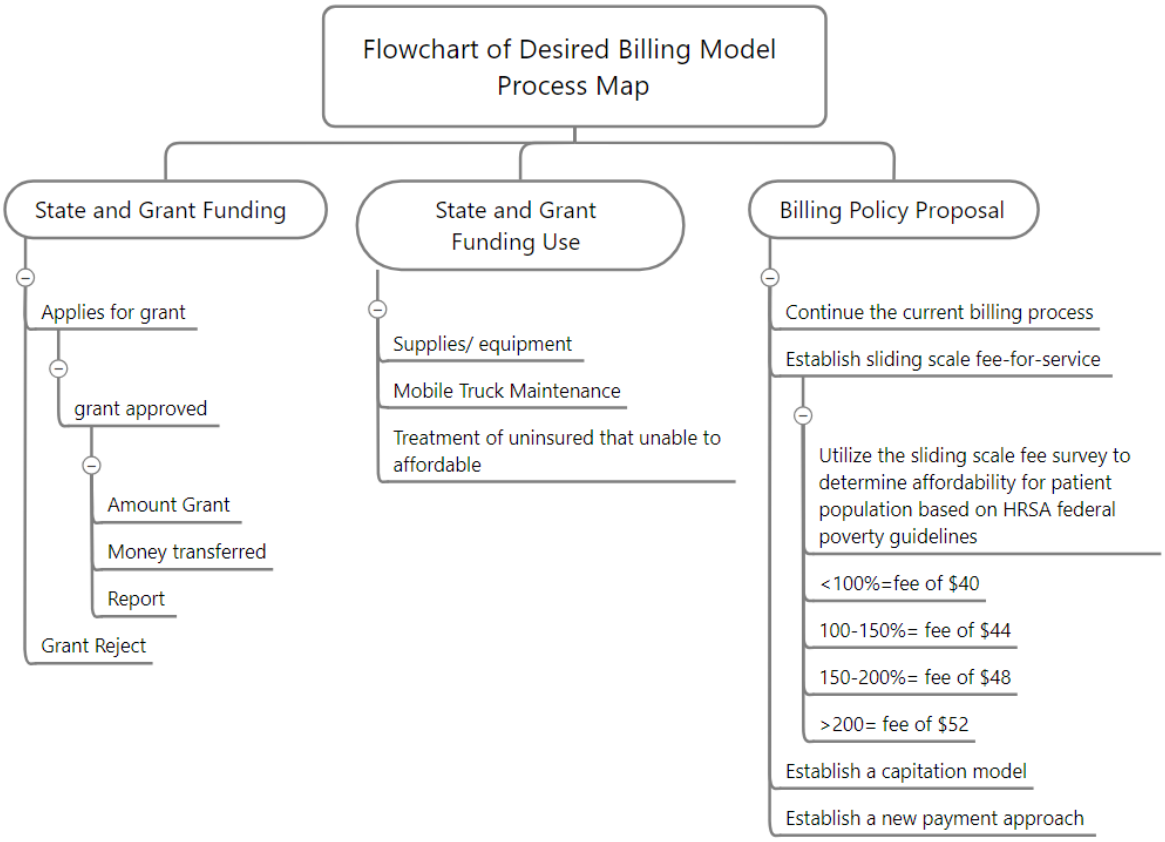


Figure 3

Flowchart of the Desired Process Map



Appendix A

Policy Audit Tool

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CRITERIA	PUBLIC HEALTH IMPACT	FEASIBILITY	ECONOMIC AND BUDGETARY IMPACT	
Scoring Definitions	Low: small reach, effect size, and impact on disparate populations Medium: small reach with large effect size or large reach with small effect size High: large reach, effect size, and impact on disparate populations	Low: No/small likelihood of being enacted Medium: Moderate likelihood of being enacted High: High likelihood of being enacted	Less favorable: High costs to implement Favorable: Moderate costs to implement More favorable: Low costs to implement	Less favorable: costs are high relative to benefits Favorable: costs are moderate relative to benefits (benefits justify costs) More favorable: costs are low relative to benefits
			BUDGET	ECONOMIC
Policy 1	❑ Low ❑ Medium ❑ High Concerns about the amount or quality of data? (Yes / No)	❑ Low ❑ Medium ❑ High Concerns about the amount or quality of data? (Yes / No)	❑ Less favorable ❑ Favorable ❑ More favorable Concerns about the amount or quality of data? (Yes / N	❑ Less favorable ❑ Favorable ❑ More favorable Concerns about the amount or quality of data? (Yes / No
Policy 2	❑ Low ❑ Medium ❑ High Concerns about the amount or quality of data? (Yes / No)	❑ Low ❑ Medium ❑ High Concerns about the amount or quality of data? (Yes / No)	❑ Less favorable ❑ Favorable ❑ More favorable Concerns about the amount or quality of data? (Yes / No)	❑ Less favorable ❑ Favorable ❑ More favorable Concerns about the amount or quality of data? (Yes / No)
Policy 3	❑ Low ❑ Medium ❑ High Concerns about the amount or quality of data? (Yes / No)	❑ Low ❑ Medium ❑ High Concerns about the amount or quality of data? (Yes / No)	❑ Less favorable ❑ Favorable ❑ More favorable Concerns about the amount or quality of data? (Yes / No)	❑ Less favorable ❑ Favorable ❑ More favorable Concerns about the amount or quality of data? (Yes / No

Appendix B

Policy Analysis Key Questions

FRAMING QUESTIONS	
• What is the policy lever—is it legislative, administrative, regulatory, other? • What level of government or institution will implement? • How does the policy work/operate? (e.g., is it mandatory? Will enforcement be necessary? How is it funded? Who is responsible for administering the policy?) • What are the objectives of the policy? • What is the legal landscape surrounding the policy (e.g., court rulings, constitutionality)? • What is the historical context (e.g., has the policy been debated previously)? • What are the experiences of other jurisdictions? • What is the value-added of the policy? • What are the expected short, intermediate, and long-term outcomes? • What might be the unintended positive and negative consequences of the policy?	
CRITERIA	QUESTIONS
Public health impact: Potential for the policy to impact risk factors, quality of life, disparities, morbidity, and mortality	• How does the policy address the problem or issue (e.g., increase access, protect from exposure)? • What are the magnitude, reach, and distribution of benefit and burden (including impact on risk factor, quality of life, morbidity and mortality)? • What population will benefit? How much? When? • What population will be negatively impacted? How much? When? • Will the policy impact health disparities / health equity? How? • Are there gaps in the data/evidence-base
Feasibility*: Likelihood that the policy can be successfully adopted and implemented	Political • What are the current political forces, including political history, environment, and policy debate? • Who are the stakeholders, including supporters and opponents? What are their interests and values? • What are the potential social, educational, and cultural perspectives associated with the policy option (e.g., lack of knowledge, fear of change, force of habit)? • What are the potential impacts of the policy on other sectors and high priority issues (e.g., sustainability, economic impact)? Operational • What are the resource, capacity, and technical needs developing, enacting, and implementing the policy? • How much time is needed for the policy to be enacted, implemented, and enforced? • How scalable, flexible, and transferable is the policy?
Economic and budgetary impacts: Comparison of the costs to enact, implement, and enforce the policy with the value of the benefits	Budget • What are the costs and benefits associated with the policy, from a budgetary perspective? • e.g., for public (federal, state, local) and private entities to enact, implement, and enforce the policy? Economic • How do costs compare to benefits (e.g., cost-savings, costs averted, return on investments, cost-effectiveness, cost-benefit analysis, etc.)? • How are costs and benefits distributed (e.g., for individuals, businesses, government)? • What is the timeline for costs and benefits? • Where are there gaps in the data/evidence-base?

*In assessing feasibility, identifying critical barriers that will prevent the policy from being developed or adopted at the current time is important. For such policies, it may not be worthwhile to spend much time analyzing other factors (e.g., fiscal and economic impact). However, by identifying these critical barriers, you can be more readily able to identify when they shift and how to act quickly when there is a window of opportunity.

Appendix C

Sliding Scale Fee Schedule Based on HRSA Poverty Guideline

Sliding Fee Schedule

Record ID _____

2023 Poverty Guideline for the 48 Contiguous States and the District of Columbia

Persons in family/household

Poverty Guideline	
1	$14,580
2	2 $19,720
3	3 $24,860
4	4 $30,000
5	5 $35,140
6	6 $40,280
7	7 $45,420
8	8 $50,560

*For families/households with more than 8 persons, add $5,140 for each additional person

Appendix D

Sliding Scale Fee Program Survey

SLIDING SCALE FEE PROGRAM SURVEY

Sliding scale Fee Information

It is the policy of this mobile clinic to provide essential services regardless of the patient's ability to pay. Please complete the following questions.

1. **Please include the number of all household members, including those under the age 18.**
   Number of house members _____

Annual Household Income: Household: gross wage, salaries, tips	**Yes**	**No**
10,000-30,000		
30,000-50,000		
50,000-70,000		
>70,000		

OFFICE USE ONLY

Patient ID: _____

Approved Discount: _____

Approved by: _____

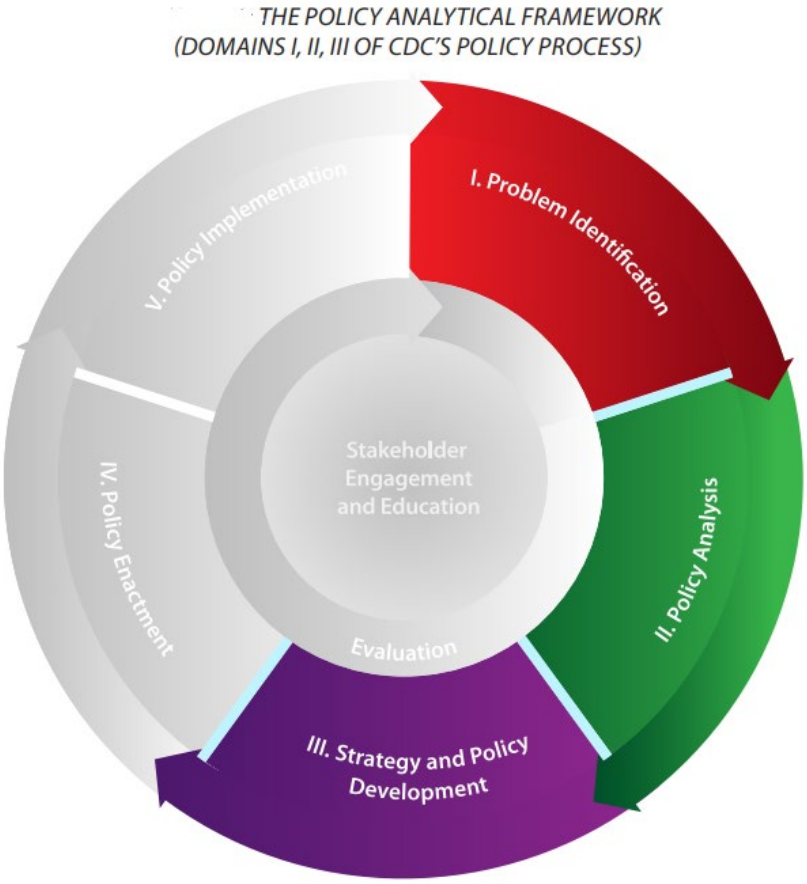
Date Approved: _____

Self-declaration of income may also be used.

Site reference guide - national health service corps | NHSC. Health Resources and Services Administration. (2023, March). Retrieved May 7, 2023, from https://nhsc.hrsa.gov/sites/default/files/nhsc/nhsc-sites/nhsc-site-reference-guide.pdf

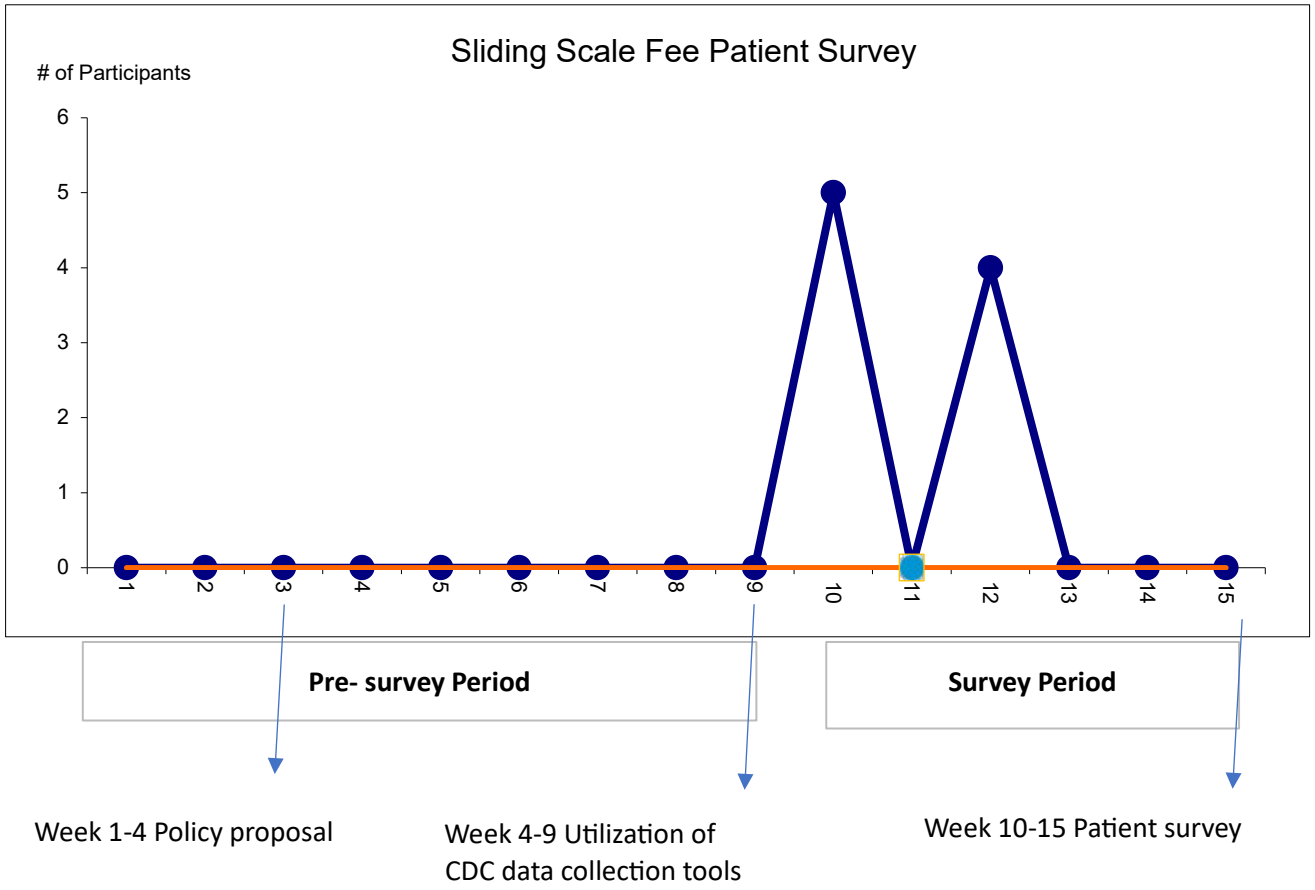
Appendix E

Center for Diseases and Prevention Control Policy Analytical Framework



Appendix F

Run Chart Sliding Scale Fee Patient Survey



Appendix G

Bar Chart of Survey Participants and Income Level