

### Mohalla Clinic cum Portable Cabins: One of the Emerging Health System Models

**Running Title:** Mohalla Clinic cum Portable Cabins

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#### Abstract

This review article describes the Mohalla clinic cum portable cabin model, which is now being adopted as one of the emerging healthcare models to deliver community healthcare services. This clinic serves as the first point of contact for the patients. This model is expected to improve availability, accessibility of diagnostic and outpatient door services, and reduce the waiting time. It can reduce the patient's referral load to secondary and tertiary care centers. This short review article is based on literature review of published articles from various data sources. There are indications that this initiative has contributed to a decline in out-of-pocket expenditure on medicine, diagnostics, and other services. This study highlights the services, impact, and recommendations emerging from implementation of Mohalla Clinics cum portable cabins.

**Keywords:** Community clinic, health services, health system strengthening, primary health care, urban health, portable container clinic, mobile clinic.

#### Introduction

The Mohalla clinic cum Portable Cabins healthcare model refers to a system where healthcare services are delivered either in either in clinics that are prepared by converting locally available rooms in the streets or inside a modular structure construction. It has been envisaged as Pre-Engineered Insulated Box Type Re-Located Structures (Portable cabins) to be manufactured and installed through the Public Works Department [1]. The new Mohalla clinic is assembled and disassembled quickly and needs little space. It also fits into very tight spaces. It has beautification with modular interiors. These clinics are easy and quick to build.

These clinics are of the initiatives started by the government towards accessible and quality health care services for the population living mainly in slums, unauthorized temporary houses, Jhuggi-Jhopri clusters, and rural-urban population. In these areas, the primary healthcare facilities were not fully accessible and were inadequate [1]. The different healthcare delivery systems seen in some states and union territories like India's capital state formulated a four-tier healthcare delivery system that is as follows: -

- Mohalla Clinic cum Portable Cabins {for primary health care}
- Multi-speciality cum Poly Clinic {for secondary health care in the form of outpatient department (OPD) consultation by specialist doctors, including laboratory

diagnostics}

- Multi-Speciality Hospital {for inpatient department (IPD) care, earlier called a 'Secondary Level Hospital'}
- Super-Speciality Hospital {earlier called 'Tertiary Level Hospital'}

The sole purpose of this initiative is to improve the healthcare system and boost primary healthcare facilities in urban and rural areas that lack medical infrastructure. It was targeted to provide primary health facilities to people in their neighbourhoods, focusing on people residing in poor localities. The primary objective of the Mohalla clinic is to improve public health, reduce hospital burdens, and enhance facilities in the lower strata of society. Mohalla Clinic envisions linking various domains of CHESS [2]{cleanliness, health, education, sanitation, and social sectors} strategy to enhance healthcare at the grassroots level. This health facility model became a key for reforming the health system and scaling primary health care in both rural and urban areas of Indian states [3]. The idea for these clinics stemmed from the success of mobile vans and medical units [4]. Also, to boost public health, healthcare is made affordable & accessible with free medication, consultation, and health check-ups in these clinics. These Mohalla clinics captured the attention and interest of the state-level health service delivery initiatives. The present review highlights the objective of Mohalla clinics, which helps to analyze its strengths and limitations, including advantages, impacts, and recommendations. This will become a key model for other Indian states in the healthcare delivery system. It provides an opportunity to consider this initiative a successful health model toward achieving universal health coverage in India.

## Methodology

This review article is written with a prime focus on the definition, implementation, and success or failure of the Mohalla clinic. For this review, an extensive literature search was done on various data sources such as PubMed, Scopus, and Web of Science, using the keywords 'mobile health unit', 'mobile clinic', 'community care', 'primary health

care', 'urban health', 'health system strengthening', 'mohalla clinic', and 'portable container clinic', a summary of search strategy was given in Table 1. The article search was limited to original research and review articles, published in journals and book sections for the last ten years.

## Results and discussion

Mohalla Clinic has improved access to primary health care within the community residence within a radius of one to five kilometers along with availability, affordability, accessibility, flexibility, proximity, and community participation [5]. They are designed to accommodate various healthcare facilities such as examination rooms, laboratories, pharmacy. This model is helpful for rural and remote areas where proper medical infrastructure is lacking. They serve as temporary or semi-permanent healthcare facilities. They can be deployed in areas affected by natural disasters, during health camps, in places far away from the local rural, or urban community, or underserved populations, and regions.

In India, the first point of contact for sick patients with the doctor is seen at the primary-level healthcare facility [6]. In urban areas, the lack of adequate space to construct health centers burdens the patient load in tertiary care hospitals. To overcome such issues, portable cabins can play a crucial role. It will help to increase the number of community clinics and accelerate schemes like "Health for all" [7,8]. An official report of the Indian government release stated that approximately 800,000 people in July 2016 were provided health services, including 43,000 tests done in five months [4]. The statistic of the Mohalla Clinic stated that on average ₹500- ₹2000 money is saved monthly for households of five [9].

### Setting up Mohalla Clinic cum portable cabins

It has been envisaged in the form of Pre-Engineered Insulated Box Type Re-Located Structures (Portable cabins), which are to be manufactured and installed through the Public Works Department. Other options

include rental, government premises, Urban Shelter Improvement Board, and BVK (Basti Vikash Kendra) buildings. Approximately, more than 518 Mohalla clinics cum portable cabins are working in India's capital city [10].

## Human resource

Each Mohalla clinic caters to a population of 10000-15000 individuals within a radius of one to five Kilometres. In one clinic, a minimum of one doctor with 2-3 helping staff like one ANM (auxiliary nurse midwife), one pharmacist cum phlebotomist, and one lab technician are placed, who work in shifts of either morning (8 AM to 2:30 PM) or the evening (2 PM to 6 PM). Some of the new interventions, like a medical backup team, are also made so that the functioning of the clinic remains unaffected [11]. Mohalla clinics cum portable cabins function at the grassroots level in offering referral services to other dispensaries and tertiary care hospitals. On the verge of the zero-cost model, all tests are done free of cost, and patient samples are taken in portable cabin clinics. Still, due to a need for proper medical equipment, testing is outsourced to some private laboratories and government hospitals [12]. The government is trying to hire more doctors and paramedical staff in these portable cabins, which has created more than 10,000 jobs for them [11].

## Services provided by Mohalla Clinic cum portable cabins.

**Access** The average distance for getting a consultation from a Mohalla clinic is within a radius of five kilometres. However, patients currently travel 2.5 to 3 kilometres to reach the clinic. For low-income families and daily wage labourers, this reduces transportation costs. The concept of a portable clinic in the neighbourhood vicinity made it easier for senior citizens and differently-abled persons to consult with a doctor [16].

**Waiting time** This model helps reduce waiting time by about half of the tertiary care patient waiting load time and lowers costs, along with providing free medication, consultation, and referral services for tests and surgeries to higher secondary or tertiary

level hospitals [14].

**Quality of care** Mohalla clinic cum portable cabin model helps to reduce the patient load in tertiary care patient center in general but the dedication of doctors and paramedical staff is the key to quality care. During the COVID-19 pandemic, these portable cabin clinics played a major role in ensuring the provision of essential primary healthcare services. where service continuity was assured yet risk of transmission was minimized [18].

**Diagnostics** The disease diagnosis is conducted through physical identification and clinical symptom confirmation via offering all the tests available at the center and nearby poly lab. Few clinics collect sputum to test for tuberculosis (TB) and after confirmation, the patient undergoes directly observed treatment short course (DOTS) centers [16]. During the COVID-19 pandemic, these portable cabins served for offering testing services, and contact tracing among community and contaminated zones [18].

**Medicine** Mohalla clinic cum portable clinic disburses free medicines as per need. These clinics have more than 109 types of essential medicines that cover general treatment [16]. The study report highlights that the medicine came from the demand of the patient's load visited for getting consultation. This also helps to ensure the all-time availability of the medicine at the clinic, that was dispensed for the period of the week to the patients [16].

**Laboratory** All diagnostic lab investigations are carried out by the empanelled laboratory for the clinic, and year-wise, OPD and Lab test status is maintained [4]. This unique healthcare initiative became a key model for reducing the waiting time including tests and Outpatient Department (OPD) consultations compared to other tertiary care hospitals [14]. The clinic caters all lab test free of cost and also referrals to the poly labs for getting result fast for those tests which are not available at portable clinic.

**Availability of services** Primary medical treatment for curative care of common illnesses like fever, cough, cold, diarrhoea, skin problems, respiratory problems,



Immunization, etc., and a preventive, promotive component of national/state health programs are provided in the clinics [13]. The portable cabin model helps assess children's nutritional status, provides family and health counselling, and is a common place for information, education, communication awareness, first aid, dressing, and management of minor wounds, along with referral services.

### **Impact of Mohalla Clinic cum portable cabins**

- The Mohalla Clinic model helps save time and money as the health facility is within the community with good quality health services [12]. It also leads to timely diagnosis, affordable treatment, and referral services for tertiary care hospitals. The Mohalla clinic model helps the community gain freedom from quacks as the government recruits qualified doctors for patient safety, increasing patient-doctor interaction time.
- Mohalla clinics cum portable cabins have become an emerging health model for adoption and emulation in some states to boost their healthcare delivery system [4]. This opportunity helps to achieve the targets of the sustainable development goal (SDG) 3.8 on universal health coverage, including financial risk protection and decentralization of healthcare for everyone to avail safe, effective, and affordable treatment with a particular focus on the allocation of budgets for boosting public health [13].
- Portable cabins are accessible, easily transferable, and can be installed within no time, wherever there is space. It can withstand the danger of theft, as these are made from Pre-Engineered Insulated Box Type Re-Located Structures. These clinics offer 212 tests and 110 types of medicines. These portable cabins help reduce the footfall of about 1.6 crore OPDs in hospitals [9].
- The cost of consultation per visit was more than 3-times higher than that of urban PHC Rs 325 and 8- times higher than that of mohalla clinic Rs 143 at Delhi. These costs were Rs 1099 and Rs 1818 at government and private hospital respectively [17].

### **Advantages**

- Accessibility in the areas where permanent healthcare construction is challenging. They bridge the gap between rural and urban healthcare services closer to need.
- Affordability as they need fewer resources and time for the cost-effective solution to building traditional brick-and-mortar healthcare.
- Flexibility mainly focuses on mobility and scalability as they can be easily relocated to higher demand to accommodate additional medical services based on the community's specific needs.
- Quick response in case of emergency, pandemic, and outbreak situation. At that time, portable cabins could be used for immediate medical support.
- Portable Cabin's focus lies in delivering primary healthcare services, decreasing the patient load at tertiary care hospitals, and reducing waiting time.

### **Conclusion**

Mohalla clinic cum portable cabins have brought healthcare services, free medication, and diagnostics to the neighbourhood. This will help in achieving the universal healthcare goal of "health for all" to attain comprehensive care. This concept of portable cabins helps reduce the pressure of patient load in tertiary care hospitals. It also reduces waiting time for consultation within the neighbourhood's local vicinity. The preventing outreach services should be linked with existing health facilities for monitoring the quality assurance of diagnostic services. This will help to improve the services provided by the clinics. These portable cabins have succeeded in preventive, promotive, curative, and rehabilitative health services for all. The number of increasing OPDs and patient crowds in these clinics associated with quality care services encourages other states to adopt this model. Thus, portable cabins are a positive step towards universal primary healthcare coverage for the community. The community participation and decentralization of site selection for the construction of portable cabins will help to improve the functioning of such clinics and lastly reduces

patient's burden on tertiary care hospitals.

### Recommendations

Dental, and ophthalmic services can also be included in these clinics, along with an adequate number of increased doctors and paramedics. This will help to bring quality health services to the local vicinity. Portable cabin helps to reduce the cost of travel and overcrowding in tertiary care hospitals, along with potential referral linkage becoming affordable [15]. Mohalla clinic cum portable cabin helps to monitor diagnostic care quality assurance, outreach services should be linked with existing health facilities. This will help to improve ongoing services provided by the clinics. Portable cabin installation should be considered more for replacing the burden of rental space premises. Local residence

spaces and barren plots in the government development authorities can be converted to construct Mohalla clinics. Portable cabin installation requires limited space to construct the basic health facility infrastructure.

Distribution of condoms and sanitary pads automatic vending machines should be installed at each Mohalla clinic cum portable cabins along with a provision of health counsellors and displayed information, education, and communication (IECs). Purposes like- capacity building among medical professionals, promoting medical skills, short-term health courses such as first aid, workshops, and volunteering activities towards safe health and personal hygiene, these portable cabins became a huge success place.

Table 1 shows the search keyword terms and results found in the database

Database	No	Search Query	Duration	Results
<b>PubMed</b>				
	#1	<b>community care) OR (primary health care) OR (urban health)) OR (health system strengthening) AND (India)</b>	2012 - 23	2309
	#2	<b>Mobile health unit) OR (mobile clinic)) OR (portable container clinic)) OR (Mohalla Clinic)) AND (India)</b>	2012 - 23	57
	#3	#1 AND #2		21
<b>Scopus</b>				
	#1	(TITLE-ABS-KEY ( <b>community care</b> ) OR TITLE-ABS-KEY ( <b>primary health care</b> ) OR TITLE-ABS-KEY ( <b>health system strengthening</b> ) OR TITLE-ABS-KEY ( <b>India</b> ))	2012 - 23	443,499
	#2	(TITLE-ABS-KEY ( <b>mobile health unit</b> ) OR TITLE-ABS-KEY ( <b>portable container clinic</b> ) OR TITLE-ABS-KEY ( <b>mohalla clinic</b> )) OR TITLE-ABS-KEY ( <b>India</b> ))	2012 - 23	22
	#3	#1 AND #2		15
<b>Web of Science</b>				
	#1	<b>portable container clinic</b> (All Fields) OR <b>mohalla clinic</b> (All Fields)	2012 - 23	17
	#2	<b>community care</b> (All Fields) OR <b>primary health care</b> (All Fields) OR <b>urban health</b> (All Fields) OR <b>health system strengthening</b> (All Fields) OR <b>India</b> (All Fields)	2012 - 23	2,593,706
	#3	#1 AND #2		6

## References

- Mohalla clinic, Delhi [Internet]. 2023 [cited 2023 Mar 31]. Available from: [http://health.delhigovt.nic.in/wps/wcm/connect/doit\\_health/Health/Home/Direc torate+General+of+Health+Services/Mohalla+Clinics](http://health.delhigovt.nic.in/wps/wcm/connect/doit_health/Health/Home/Direc torate+General+of+Health+Services/Mohalla+Clinics). Accessed on: 12 March 2023
- Lahariya C. Mohalla Clinics of Delhi, India: Could these become platform to strengthen primary healthcare? -2017
- Agrawal T, Bhattacharya S, Lahariya C. Pattern of Use and Determinants of Return Visits at Community or Mohalla Clinics of Delhi, India. *Indian J Community Med* [Internet]. 45(1): 77–82. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/32029989> .20 January 2020
- Mukhopadhyay D, Dudhraj V, Malhotra N, ... Can Mohalla Clinics be a Catalyst for Ayushman Bharat Pradhan Mantri Jan Arogya Yojna to achieve Universal Health Coverage in India? [Internet]. *researchgate.net*. Available from: [https://www.researchgate.net/profile/Dudhraj-Mukhopadhyay/publication/348731059\\_Can\\_Mohalla\\_Clinics\\_be\\_a\\_Catalyst\\_for\\_Ayushman\\_Bharat\\_Pradhan\\_Mantri\\_Jan\\_Arogya\\_Yojna\\_to\\_achieve\\_Universal\\_Health\\_Coverage\\_in\\_India/links/6013215b299bf1b33e30c0db/Can-Mohalla-C](https://www.researchgate.net/profile/Dudhraj-Mukhopadhyay/publication/348731059_Can_Mohalla_Clinics_be_a_Catalyst_for_Ayushman_Bharat_Pradhan_Mantri_Jan_Arogya_Yojna_to_achieve_Universal_Health_Coverage_in_India/links/6013215b299bf1b33e30c0db/Can-Mohalla-C) .January 2021
- Health clinic, Delhi [Internet]. 2023 [cited 2023 Mar 23]. Available from: <https://health.delhi.gov.in/> Accessed on: 31 March 2023
- Lahariya C. Access, utilization, perceived quality, and satisfaction with health services at Mohalla (Community) Clinics of Delhi, India. *J Fam Med Prim care* [Internet]. 2020 Dec;9(12):5872–80. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/33681011>
- Financial Express. Health for all scheme and its benefits. *health news* [Internet]. 2018 Jan 17; Available from: <https://www.financialexpress.com/india-news/1018418/>
- Health for all schemes in Delhi. Available from: <https://www.financialexpress.com/india-news/1018418/> Accessed on: 20 January 2018
- Mohalla Clinic [Internet]. Available from: <https://mohallaclinic.in/> Accessed on: 15 March 2023
- Total List of Mollaha Clinic, Delhi [Internet]. Available from: <http://health.delhigovt.nic.in/wps/wcm/connect/dabccce80466a5c85808aa354ea833311/1.pdf?MOD=AJPERES&Imod=-1072952936&CACHEID=dabccce80466a5c85808aa354ea833311> Accessed on: July 2018
- Seem, T, NandraJ S. Reconfiguring urban primary healthcare [Internet]. ... , utilization and financing mohalla clinics of .... *academia.edu*; 2021. Available from: [https://www.academia.edu/download/67706651/EPW\\_Vol\\_LVI\\_No\\_25\\_19\\_June\\_2021.pdf#page=112](https://www.academia.edu/download/67706651/EPW_Vol_LVI_No_25_19_June_2021.pdf#page=112)
- Seem T, Nandraj S. Reconfiguring Urban Primary Healthcare Operations, Utilisation, and Financing of Mohalla Clinics of Delhi. *Econ Polit Wkly*. 2021 Jun 22;VOI LVI:112 to 119.
- mohalla clinic DELHI [Internet]. Available from: <https://mohallaclinic.in/> Accessed on: 14 June, 2023
- Sah T, Bailwal N, Kaushik R. Are Mohalla clinic making patients healthy in Delhi. Are Mohalla Clinics making the patients Healthy in Delhi? [Internet]. 2019; Available from: <https://thewire.in/health/are-mohalla-clinics-making-the-patients-healthy-in-Delhi>
- Sharma DC. Delhi looks to expand its community clinic initiative. *Lancet* [Internet]. 2016 Dec;388(10062):2855. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S0140673616325132>
- Have Delhi's Mohalla Clinics Ensured 'Healthcare for All'? | Economic and Political Weekly (epw.in) <https://www.financialexpress.com/india-news/health-for-all-scheme-in-Delhi-and-how-it-will-benefit-you/1018418/>

17. Garg, Charu CGoyanka, Roopali. A comparison of the cost of outpatient care delivered by Mohalla Clinics compared to other public and private facilities in Delhi, India DOI:10.1093/heal/czad033
18. Lahariya C. Access, utilization, perceived quality, and satisfaction with health services at Mohalla (Community) Clinics of Delhi, India. DOI: 10.4103/jfmpc.jfmpc\_1574\_20

