FEASIBILITY STUDY OF SMART JUBICARE HEALTH CENTRES

Evaluating Viability & Implementation

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Introduction

- The geographically remote and economically disadvantaged regions with limited access to quality healthcare services urgently need improved healthcare infrastructure to meet the demands of their growing populations. This lack of infrastructure threatens these populations by leading to significant unmet medical needs and poor health outcomes. This issue can be addressed by enhancing the accessibility, affordability, and availability of health services in the most underserved areas. Developing self-sustainable, accessible, affordable, and quality health centers focused on essential preventive and curative services, as well as health promotion programs, can address the fundamental health issues prevalent in these populations.

Objectives

- **Research Question**: Will it be feasible to establish smart health centres in Jhajjar, Haryana?
- To assess the feasibility for Smart Health Centres in Jhajjar, Haryana
    a. To identify potential sites for the facility with respect to infrastructure and quality of care.
    b. To identify the specific healthcare needs of the local population in the target region
    c. To analyse the market potential for a new health facility, including potential patient volumes and capacity to pay.
    d. To develop a model framework for replicating Jubicare health centres in different geographic locations.

Background and Rationale

- The Jubilant Bhartiya Foundation is the CSR wing of Jubliant Bhartiya Group. It was established in the year 2007 with the vision to bring social change with stakeholder engagements and partnerships.
- One of the objectives of the foundation aims to strengthen basic healthcare facilities and address the severe heath challenges faced by geographically remote and economically challenged regions.
- To mitigate these challenges and issues, the Foundation aims to establish robust healthcare infrastructure in Tier 2, 3, and 4 cities, enhancing the accessibility, affordability, and availability of essential healthcare services.
- In collaboration with the IIHMR University Jaipur, a comprehensive needs assessment will be conducted to develop a model framework for the proposed health centers. The study will employ a a mixed-methods strategy combining qualitative and quantitative research techniques, to assess the feasibility and sustainability of the health centers.

Literature Review

- **Literature Review on ICU Follow-Up Care** This review examines various models of ICU follow-up care and evaluates the feasibility of intervention delivery. It highlights the importance of follow-up care in improving patient outcomes and identifies challenges such as low recruitment rates and high follow-up loss. The review suggests that non-hospital-based interventions, including telehealth, may offer better retention and recruitment rates compared to hospital-based interventions .
- **Assessing Primary Health Care in Nigeria** This study assesses the capacity of primary health care facilities in Nigeria to deliver eye health promotion. It investigates the availability, accessibility, and quality of eye health services and identifies significant gaps in service delivery. Recommendations include improving infrastructure, training healthcare workers, and enhancing public awareness to address these gaps .
- **Telemedicine for Nonacute Headaches** This review explores the feasibility and effectiveness of using telemedicine for managing nonacute headaches. It evaluates patient acceptance, cost savings, and travel savings associated with telemedicine consultations. The study finds that telemedicine is a viable option for headache management, providing benefits in terms of convenience and cost-efficiency .
- **Cross-Border Out-of-Hours GP Services** This review investigates the provision of cross-border out-of-hours general practitioner (GP) services. It assesses the challenges and benefits of such services, including accessibility, patient satisfaction, and healthcare outcomes. The study emphasizes the importance of coordinated care and suggests strategies to enhance service delivery across borders .

Literature Review

Health and Wellness Centers in India This study assesses the community's perception of Health and Wellness Centers (HWCs) in India, particularly in rural areas. It finds that HWCs are valued for their accessibility and the range of services provided, including those for noncommunicable diseases. However, it also notes gaps in mental health, dental, and injury services, and calls for improved referral systems to higher-level facilities.

- **Affordability and Availability of Healthcare in South Africa** This literature review emphasizes the critical role of primary healthcare in South Africa, especially for chronically ill patients. It highlights the barriers to healthcare access, including affordability and availability, and suggests that improving the primary healthcare system can significantly enhance health outcomes.
- **Healthcare Utilization and Perception in India** This review explores how community members perceive and utilize Health and Wellness Centers (HWCs) in India. It finds that the availability of curative treatments and services for noncommunicable diseases is highly valued. The study suggests that HWCs are a suitable model for delivering primary healthcare in rural areas, given their accessibility and relevance to community needs.
- **Healthcare Access in Low-Income Countries** This literature review discusses the barriers to healthcare access in low-income countries, focusing on affordability, availability, and acceptability. It emphasizes the importance of tailored healthcare interventions that consider local contexts and the need for comprehensive primary healthcare systems to address these barriers effectively

Methodology

Research Design

1. **Mixed-Methods Approach**:
    - **Qualitative Phase**:
        - Conduct interviews with district health officials, local representatives, and healthcare providers.
        - Aim: Identify potential areas for the health centers in three specific locations: Damdama Mohalla, Silani Gate, and Chhawni.
    - **Quantitative Phase**:
        - Collect data through household surveys using 14 selected health indicators.
        - Aim: Assess feasibility based on data under each indicator category.

Methodology

Research Design

Setting and Population

- **Location**: District Jhajjar, Haryana.
- **Population**: Local residents capable of providing informed consent.
  - **Inclusion Criteria**: Residents of the area.
  - **Exclusion Criteria**: Individuals refusing to consent.

Methodology

Data Collection Tools

- **Qualitative**: Questionnaires for interviews with district officials.
- **Quantitative**: Interview checklists for household surveys.

Duration and Sample Size

- **Study Duration**: Three months.
- **Data Collection Period**: March 2024.
- **Sample Size**: 250 households using a convenient sampling method (one respondent per household).

Feasibility Analysis

Key Components of Feasibility Analysis

1. **Identification of Potential Sites**:
   - **Locations Considered**: Damdama Mohalla, Silani Gate, and Chhawni.
   - **Criteria for Selection**: Infrastructure quality, accessibility, and healthcare needs of the local population.
2. **Healthcare Needs Assessment**:
   - **Indicators Used**: Fourteen health indicators were selected to capture comprehensive data on the healthcare needs of the local population.
   - **Survey Findings**: Data collected from 250 households provided insights into the specific health issues and the demand for healthcare services in the area.
3. **Market Potential Analysis**:
   - **Patient Volume**: Analysis of potential patient volumes based on survey data.
   - **Capacity to Pay**: Assessment of the economic capacity of the local population to afford healthcare services, which is crucial for the sustainability of the health centers.

Feasibility Analysis

Key Components of Feasibility Analysis

1. **Sustainability and Economic Viability**:
   - **Self-Sustaining Model**: Consideration of whether the health centers can operate without continuous external funding by analyzing local economic conditions and potential revenue sources.
   - **Public-Private Partnerships**: Exploration of opportunities for collaborations that could enhance the financial stability and service quality of the health centers.
2. **Ethical and Community Considerations**:
   - **Community Consent**: Ensuring informed consent from participants and addressing ethical concerns related to data collection and analysis.
   - **Cultural Sensitivity**: Incorporating local cultural and social factors into the planning and operation of the health centers to ensure community acceptance and participation.

Findings of Feasibility Study

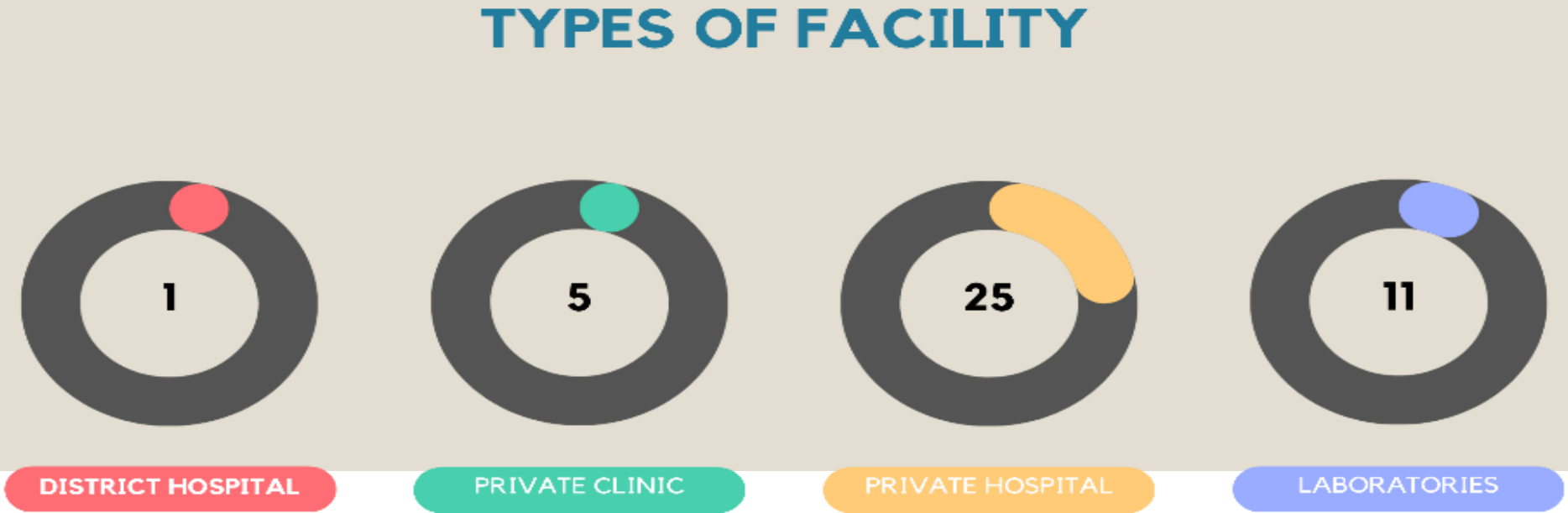
1. **Infrastructure and Accessibility**:
   - **Current State**: Existing healthcare infrastructure in the selected sites is inadequate, with many residents having limited access to quality healthcare services.
   - **Need for Improvement**: Significant improvements are needed in infrastructure and healthcare delivery to meet the growing demands of the population.
2. **Healthcare Needs**:
   - **Demand for Services**: Strong demand for both preventive and curative health services, indicating a clear need for the proposed health centers.
3. **Economic Feasibility**:
   - **Patient Capacity to Pay**: The majority of the population has limited financial resources, highlighting the need for affordable healthcare solutions.
   - **Potential for Revenue**: While economic constraints exist, there is potential for revenue generation through strategic pricing and service offerings tailored to the local population's financial capabilities.
4. **Community Support and Engagement**:
   - **Positive Reception**: The idea of establishing smart health centers received positive feedback from community members and local representatives.
   - **Engagement Strategies**: Effective community engagement and education strategies will be essential to ensure the success and sustainability of the health centers.

Results

- **Current Health Infrastructure**

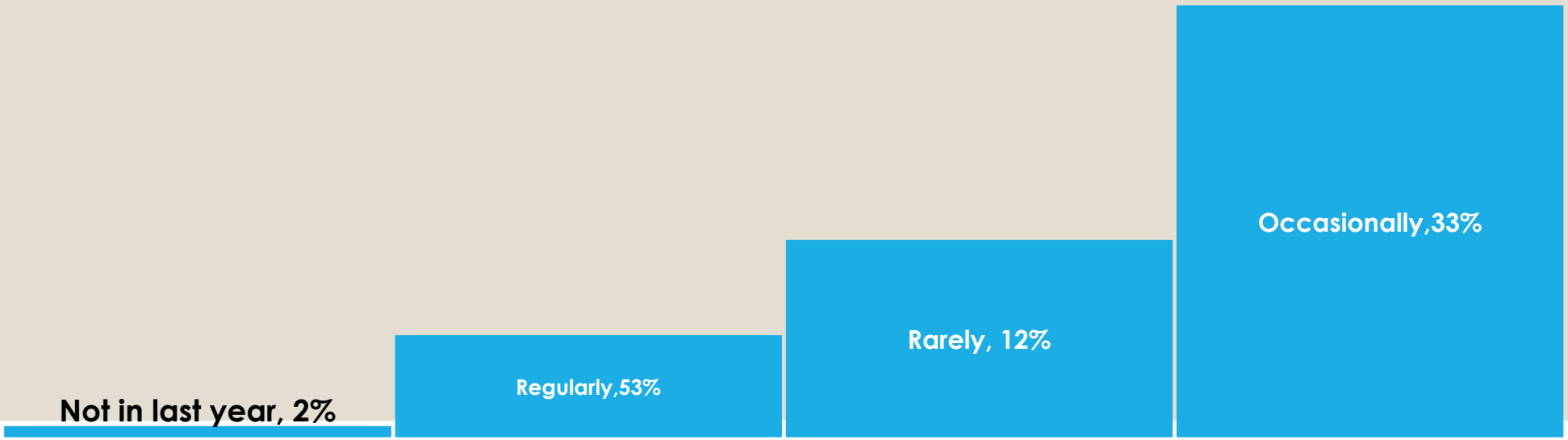
- **District Hospital**:
  - **Location**: Western part of Jhajjar, near the state highway.
  - **Accessibility**: Difficult for residents in the far eastern areas due to its location on the outskirts.

- **Private Healthcare Facilities**:
  - **Concentration**: Primarily in the western and northwestern parts of the city.
  - **Access**: Residents in other areas must travel significant distances to access these services.



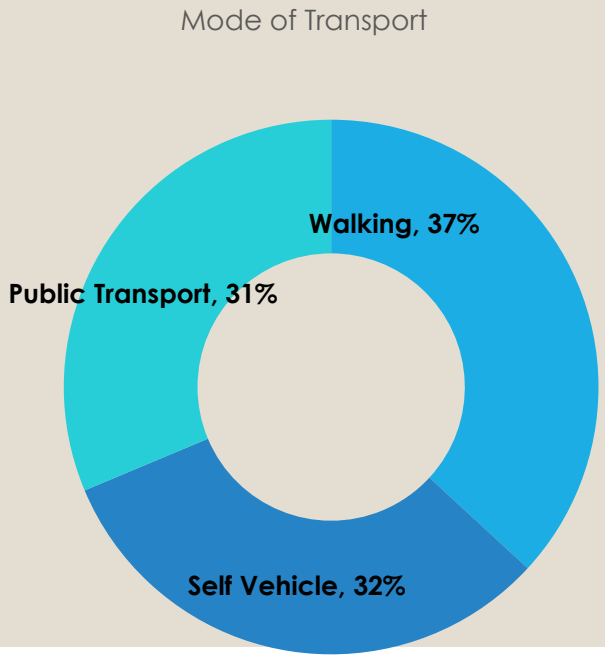
Results

- **Healthcare Utilization and Accessibility**
- **Frequency of Visits**:
  - **Data**: 86% of residents visit health facilities at least once or twice a month.
  - **Impact**: High frequency results in loss of workdays due to extensive waiting and travel times.



Results

- **Preferred Proximity**:
  - **Preference**: Most respondents prefer healthcare facilities within walking distance.
  - **Mode of Transportation**: Linked to household income; lower-income households prefer walking.



Results

- **Community Demographics**
  - **Survey Coverage**: 221 households across Damdama Mohalla, Silani Gate, and Chhawni.
    - **Average Household Size**: Approximately 5 members.
    - **Gender Distribution**: 63% males, 37% females.

Community Demographics

Name of the Area	Total Households	Total Members	Males	Females
Damdama Mohalla	95	534	341	193
Silani Gate	69	406	257	149
Chhawni	57	318	200	118
Total	221	1258	798	460

Results

- **Income Variance**:
  - **Lowest**: Damdama Mohalla, predominantly home to migrant workers.
  - **Mixed**: Silani Gate and Chhawni have both low and high household incomes.

Household Income

Locality	Total Households	Mean Household Income (Annual)
Damdama Mohalla	88	180,420.5
Silani Gate	51	214,176.5
Chhawni	67	311,701.5
Total	206	231,475.7

Results

- **Healthcare Preferences**

- **District Hospital**: Chosen for affordability.
- **Private Hospitals**: Preferred due to recommendations.
- **Private Clinics**: Chosen for proximity and reasonable pricing.

Preferred Type of Facility (Locality-wise)

Factor	Government Hospitals	Private Hospitals	Private Clinics
Affordability	High	Medium	Low
Proximity	Low	Medium	High
Recommendations	Low	High	Medium

Results

◦ Issues in Health Services

- **Key Concerns**:
  - **Damdama Mohalla**: Diagnostic tests and specialist availability, affordability.
  - **Silani Gate**: Specialist availability, affordability.
  - **Chhawni**: Specialist availability, affordability of diagnostics and medicines.

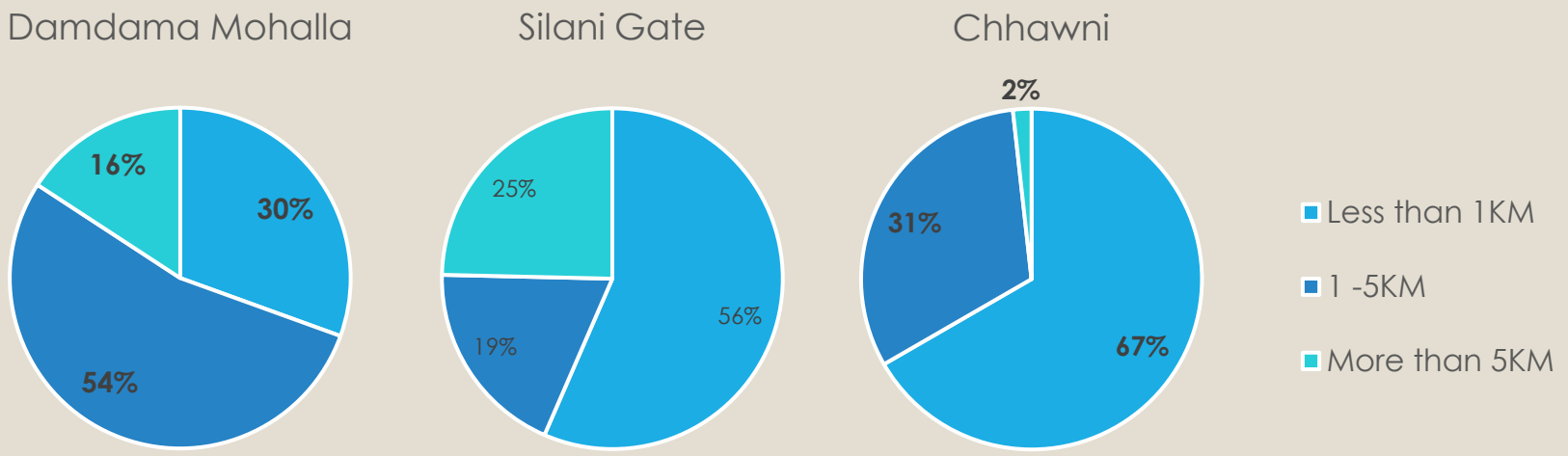
Specific Issues of Health Services

Area	Availability Issues	Affordability Issues	Accessibility Issues
Damdama Mohalla	Diagnostic tests, specialists	Diagnostic tests, specialist fees	Facility timings, distance
Silani Gate	Specialists	Diagnostic tests	
Chhawni	Specialists	Diagnostic tests, medicines, fees	

Results

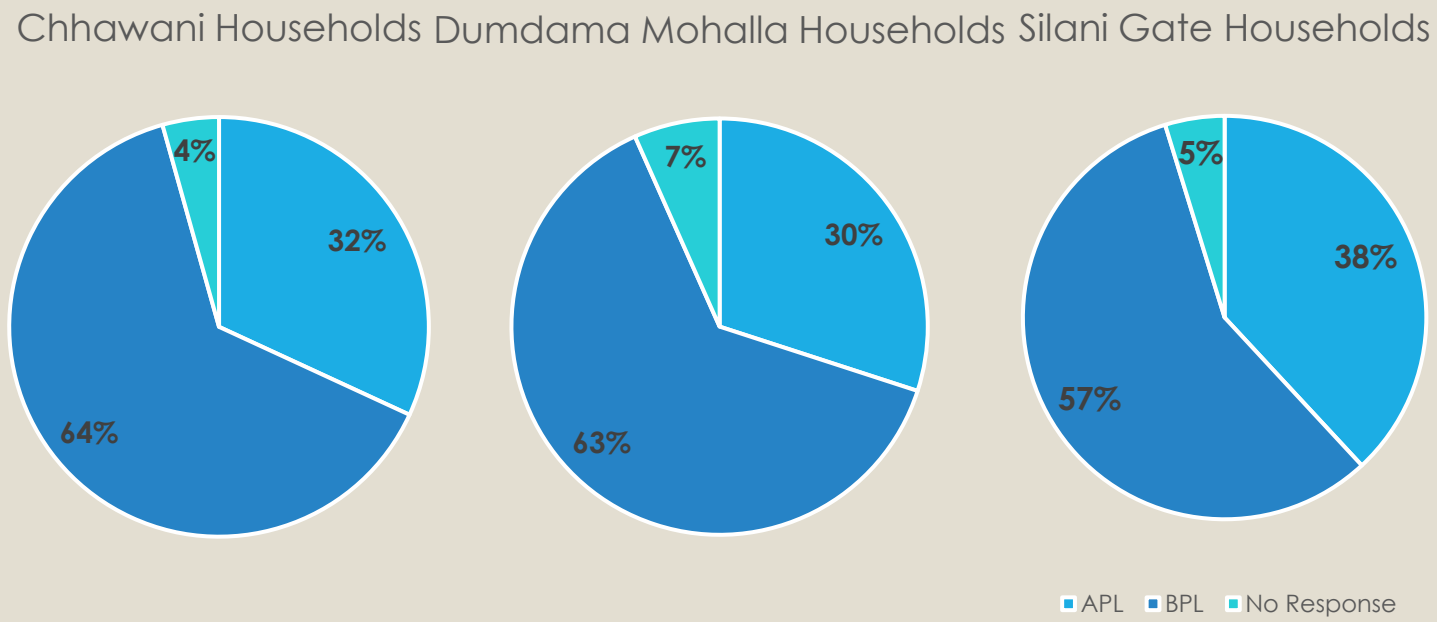
- **Community Expectations and Willingness**

- **Willingness to Travel**:
  - **Damdama Mohalla**: 60% willing to travel up to 5 km.
  - **Silani Gate**: 25% willing to travel >5 km for affordable specialist care.
  - **Chhawni**: Over 30% willing to travel up to 5 km.



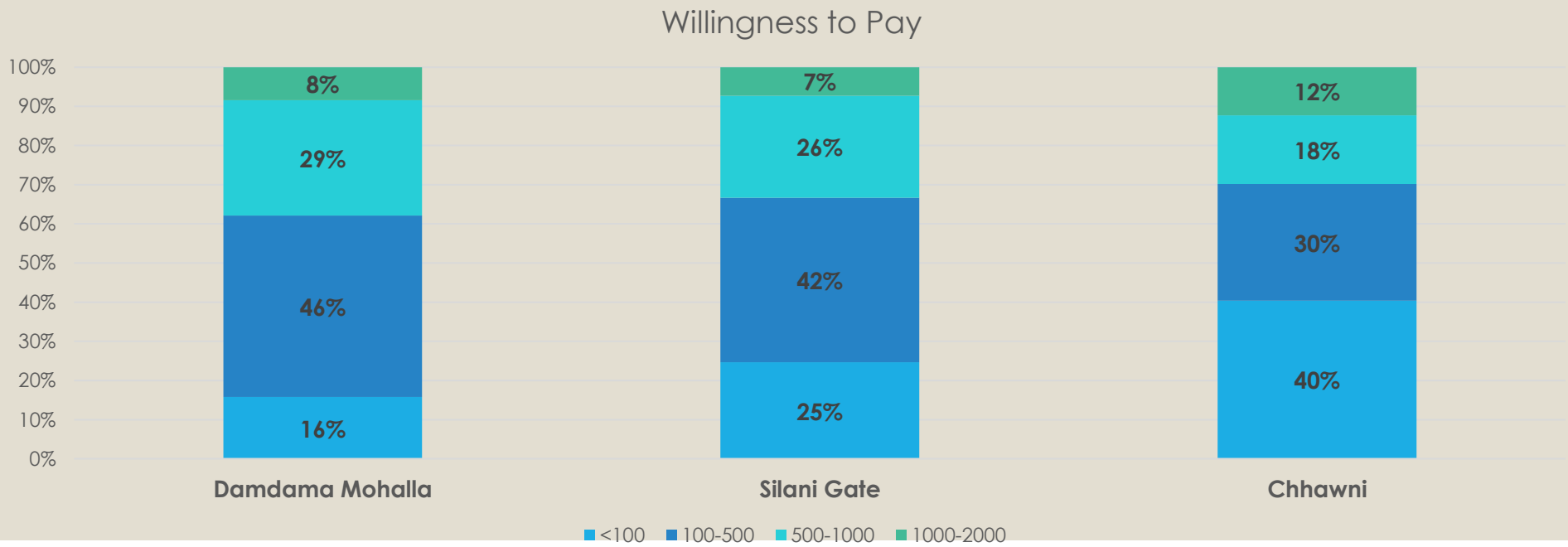
Results

- **Income Status and BPL Cards**:
  - **BPL Cards**: Higher percentage in Chhawni and Damdama Mohalla.
  - **APL Cards**: Higher percentage in Silani Gate.



Recommendations and Results

- **Willingness to Pay**:
  - **Damdama Mohalla**: 46% willing to pay Rs. 100-500, 29% willing to pay Rs. 500-1000.
  - **Silani Gate**: 42% willing to pay Rs. 100-500, 26% willing to pay Rs. 500-1000.
  - **Chhawni**: Higher willingness to pay up to Rs. 100 and Rs. 1000-2000.



Recommendations and Results

Summary of Key Results:

1. **Infrastructure Needs**: Additional healthcare facilities required in eastern parts of the city.
2. **High Healthcare Utilization**: Significant frequency of visits, leading to loss of workdays.
3. **Accessibility Preferences**: Strong preference for healthcare facilities within walking distance.
4. **Economic Constraints**: Lower average household incomes, especially in Damdama Mohalla.
5. **Healthcare Service Issues**: Availability and affordability of diagnostic tests and specialist care are primary concerns.
6. **Willingness to Pay**: Residents are willing to pay for convenient and comprehensive healthcare services.


Thank
You!