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ASPIRE- A Collaboration to Intensify  
Actions on the Non-communicable  
diseases (NCDs) Program in Telangana

# 2020-21 Annual Report

A Sanofi and PPHF Partnership

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## Executive Summary

People to People Health Foundation (PPHF), the state government of Telangana, National Health Mission (NHM), and Sanofi India, are implementing ASPIRE in 52 Basti Dawakhana (BDK) and two Urban primary health care centers (UPHC) in Medchal - Malkajgiri district of Telangana to reduce morbidity and mortality due to NCDs. The project aims to build the capacity of the health care staff and test the feasibility of community mobilisers at the urban primary healthcare level for facilitating universal health coverage.

In the first year (or Year 1), the project was developed, tested, and refined for a clearly articulated process meant to identify and assess the strengths, capacity, and resources within the public health system. This was done under the context of Urban Health to deliver NCD services, and a positioned an approach integrating components of the intervention into the existing program on NCDs, specifically through Basti Dawakhana's (BDK) for contributing to Population Based Screening efforts for NCDs. ASPIRE sensitised about 30,000 people about NCDs, and services provided at the interventional site. (Figure 1.)

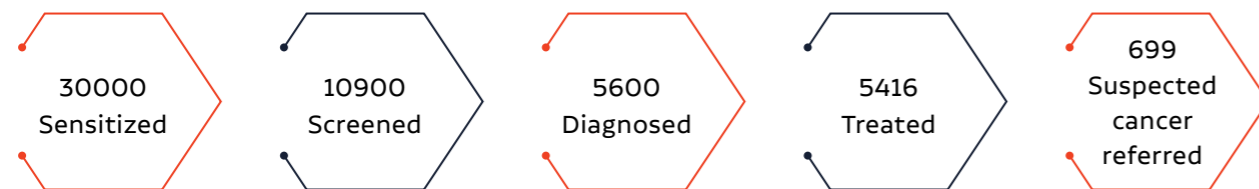


Figure 1: Population mobilised in year 1

### Impact of community mobilisers

Earlier, in the absence of basic urban medical facilities in Hyderabad slums, the poor had to visit private hospitals resulting in high expenditure. The Basti Dawakhana initiative was launched by the Greater Hyderabad Municipal Corporation in Telangana in April 2018, and it envisioned strengthening primary health care in Indian cities. The initiative is a joint endeavour of GHMC and the Union Government under the Ayushman Bharat program. Each of these Basti Dawakhana (BDK) has a doctor, ASHA workers, and an auxiliary nurse midwife. In Hyderabad, 226 Basti Dawakhana are being used by people. BDKs work from 9 am to 5 pm on all days except Sunday. In March 2022, Telangana Chief Minister K Chandrashekhar Rao has announced there should be 350 basti dawakhana in Hyderabad. At present, 256 Basti dawakhana are functioning and providing free medical care, 57 different types of tests apart from distributing free medicines. The community

mobilisers are envisioned as part of strengthening the BDKs through health promotion, timely referrals, and active follow-for care and management of NCD cases. Their role is also considered significant for the digitisation of data entry in the village health registration dashboard, NCD App to improve state HMIS system. We assessed the few indicators (Nov 21 to Feb 22), to compare the effect of presence of community mobilisers Medchal district (ASPIRE site) versus Hyderabad district, which operates without the support of community mobilisers. The figure provided documents the improvement in NCD services at BDKs. We will work further to refine this approach.

### Other Key Achievements:

All 60 community mobilisers, 45 Medical officers and 40 Staff nurses are trained.

52 ECG machines, 60 BP apparatus were distributed in Medchal District, Hyderabad.

The formative assessments were completed in November 21 for situational analysis. It documented the low awareness about BDKs, and higher presence of risk factors like smoking, alcohol, and smokeless tobacco consumption of in the community.

A Technical Advisory Group meeting was conducted in November 21 to disseminate the findings of the formative assessment.

A state-level Dissemination Workshop was conducted in December 21 to disseminate the results of the NCD formative assessment to state officials for uplifting the program.

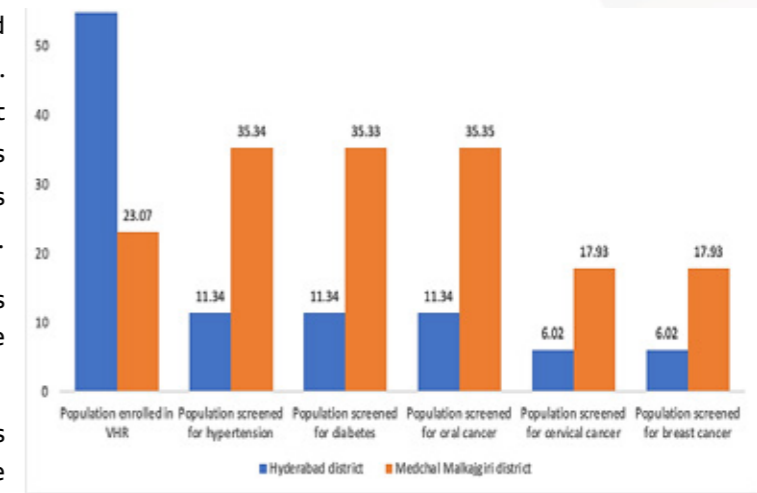


Figure 2: Comparison of NCD services in Medchal and Hyderabad: Nov 2021 to Feb 2022, Source: Non-communicable diseases - Government of Telangana portal

## Overview

India is a major contributor to the global burden of non-communicable diseases (NCDs). This constitutes a major public health challenge, impacting both social and economic development. In 2014, of all the deaths caused, 60% were estimated to be caused due to NCDs.

To address this, the People-to-People Health Foundation (PPHF) proposes to strengthen the NCD service delivery at the primary health level. PPHF is working on an integrated approach for the prevention, early detection, and capacity building for NCD services.

As part of its approach and efforts PPHF, with the support of the state government of Telangana, National Health Mission (NHM), and Sanofi India, is working towards strengthening healthcare services like prevention, health promotion, early detection, and management of NCDs and their risk factors. It is particularly working at the urban primary healthcare level to reduce morbidity and mortality due to NCDs.

### Target beneficiaries:

All adults aged 30 years and above Health care workers in urban health care centers

### Objectives:

1. Build the capacity of UPHC health team to deliver essential NCD services
2. Increased public awareness on NCDs through health education and promotion on critical health issues in the community
3. Strengthen implementation of NCD population-based screening (PBS) guidelines at the UPHC
4. Establish linkages between Aarogyashree Insurance schemes for improving treatment adherence

### Intervention site:

**Project site I:** Two primary healthcare centers (UPHC Kukatpally and UPHC Moosapet)

**Project site II:** 52 Basti Dawakhana of Medchal District

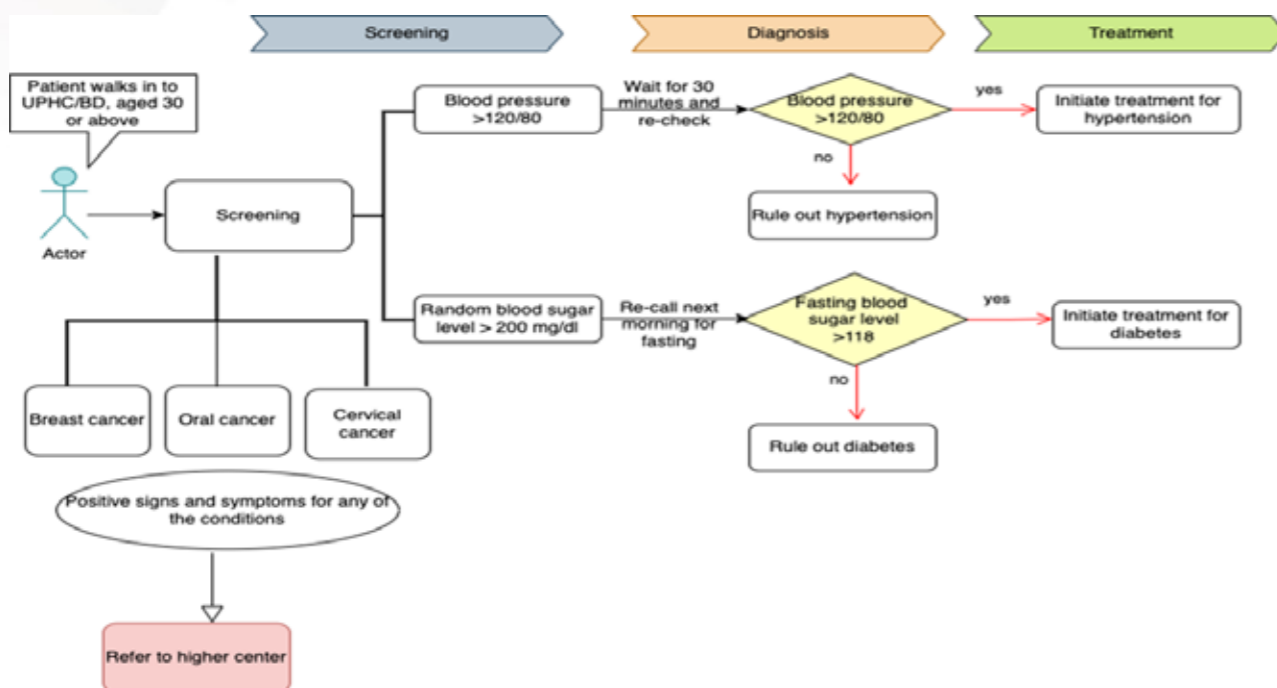


Figure 3: Project overview at each intervention site

Overview

**Strategies:**

1. Capacity building at the primary healthcare level
2. Enable community awareness through a call-to-action drive
3. Advocacy for scaling up services via community mobilisers
4. Creating digitised patient records on referrals and linking the identified cases under Aarogyasri for treatment adherence
5. Developing IEC material in the local language for display at project sites and for community mobilisation

**Key Highlight of The Year**

**RAPID FORMATIVE ASSESSMENT FINDINGS**

Need: Rapid assessment is a way of comprehensively assessing a specific health issue. It focuses on the characteristics of the health problem (here NCDs), the population groups affected, key settings and contexts, health and risk behaviours, and social

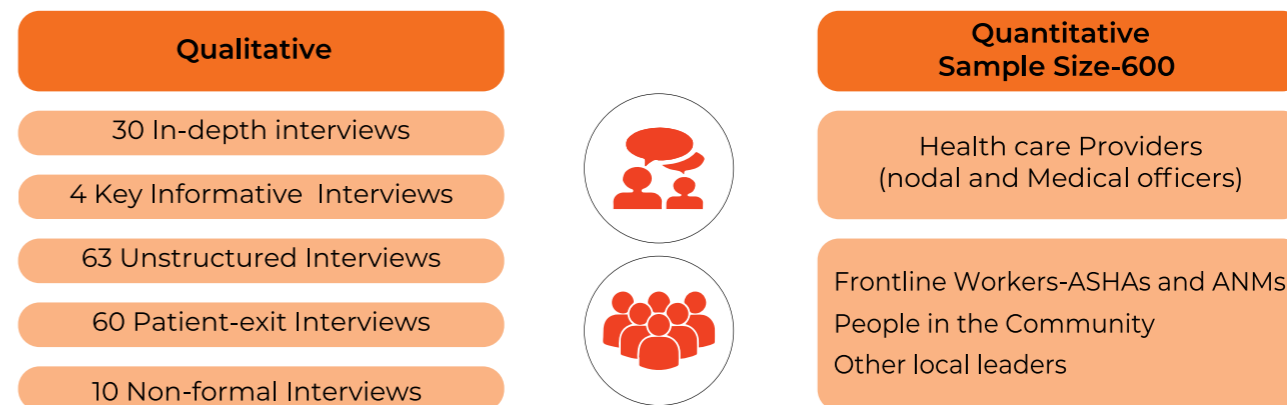
consequences. It identifies existing opportunities, resources for interventions, and helps in planning, developing, and implementing interventions and programs. Both qualitative and quantitative methods were used to compile data and analyse to drive conclusions that will be further used by PPHF and NHM to develop NCD intervention for Medchal district



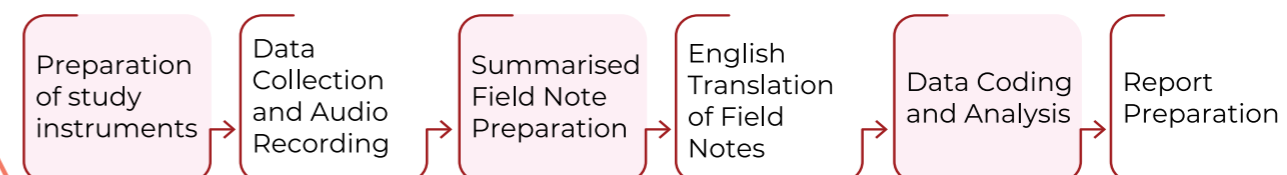
Image 1: Dr Vijaya Bhavani from Magna Carta Foundation with a medical officer for RFA interview

Key Highlight of The Year

**METHODOLOGY OF THE ASSESSMENT**



**October- November (2021)**



**Major findings:**

1. There is limited knowledge of services provided at UPHCs. Most of the respondents were aware of the NCD screening but none of them had seen a screening happen at the UPHC.
2. Awareness about Basti Dawakhana is low as more than half of the respondents (430/600) visiting the UPHC for treatment were not aware about their services, location, and purpose.
3. A majority of 261 respondents smoke daily; 232 respondents have a habit of chewing tobacco; 243 respondents consume alcohol daily.
4. Social stigma and inhibitions among the female population pose a serious barrier for Cervical and Breast cancer screening.
5. Treatment and supply of medicines to patients are regularly provided; stocks are maintained well. The Referral Mechanism from BD and UPHC are well maintained.
6. Frontline health workers expressed the need for periodic refresher training on screening, counselling, and management of NCDs.
7. Additional manpower is required as the healthcare staff at UPHC have requested for additional manpower for NCDs.
8. The sample population had limited knowledge and information about insurance and related services. Of the 600 samples, only 171 had Arogyasri, 81 had ESI cards and 80 respondents had private health insurance. A whopping number of 268 respondents did not have any health insurance.
9. Both community and healthcare professionals highlighted the need for creating awareness campaigns and outreach camps for mobilising the community for screening and management.

**Recommendations:**

**At the facility level:**

1. Strengthen the healthcare capacity by periodic and regular training on NCDs.
2. Enable the provision of community mobilisers in each Basti Dhawakana and UPHC for better service delivery.
3. Conduct a periodic review of all equipment with a strategy for its maintenance and replacement.
4. Recruit and allocate adequate skilled healthcare professionals.
5. Ensure regular and strict monitoring visits.
6. Link the NCD patients with the state Arogyasri health insurance scheme for better treatment adherence and follow ups

**At the community level:**

1. Develop resources and context-specific information and education communication materials.
2. Create community awareness during outreach camps regarding NCD risk factors and leading an unhealthy lifestyle.
3. Create a support and follow-up mechanism for suspected breast and cervical cancer cases.
4. Schedule home visits by ASHAs and ANMs for suspected cases.

**Conclusion:**

The findings of the assessment conducted in Telangana highlight the need to strengthen the screening and management of NCDs to reduce the mortality and morbidity. The primary focus must be on capacity building of the healthcare system to increase access and quality service delivery at all levels. Continuous monitoring and supportive supervision will play a crucial role in improving the health of the community.

**TECHNICAL ADVISORY GROUP MEETING**

**Need:** A Technical Advocacy Group (TAG) to provide integrated and comprehensive technical advice for program. In doing so, the TAG advised on technical, strategic policy and program issues and provided directions on an ongoing basis.

**Specific Activity:** The first TAG review meeting was conducted online on 9th November 2021 through a Zoom call. The participants included the NCD nodal officers for both Maharashtra and Telangana, district representatives from the NHM, representatives from AIIMS, ICMR, Dell.

Dr. Archisman Mohapatra from GRID council moderated the sessions and participated in the capacity of a TAG member.

**Process Followed:** Invitations were sent to experts from the field of NCDs seeking their participation to empanel as TAG members to provide guidance.

**Outcome:** A summary report of the TAG meeting was prepared and shared with the respective TAG members.

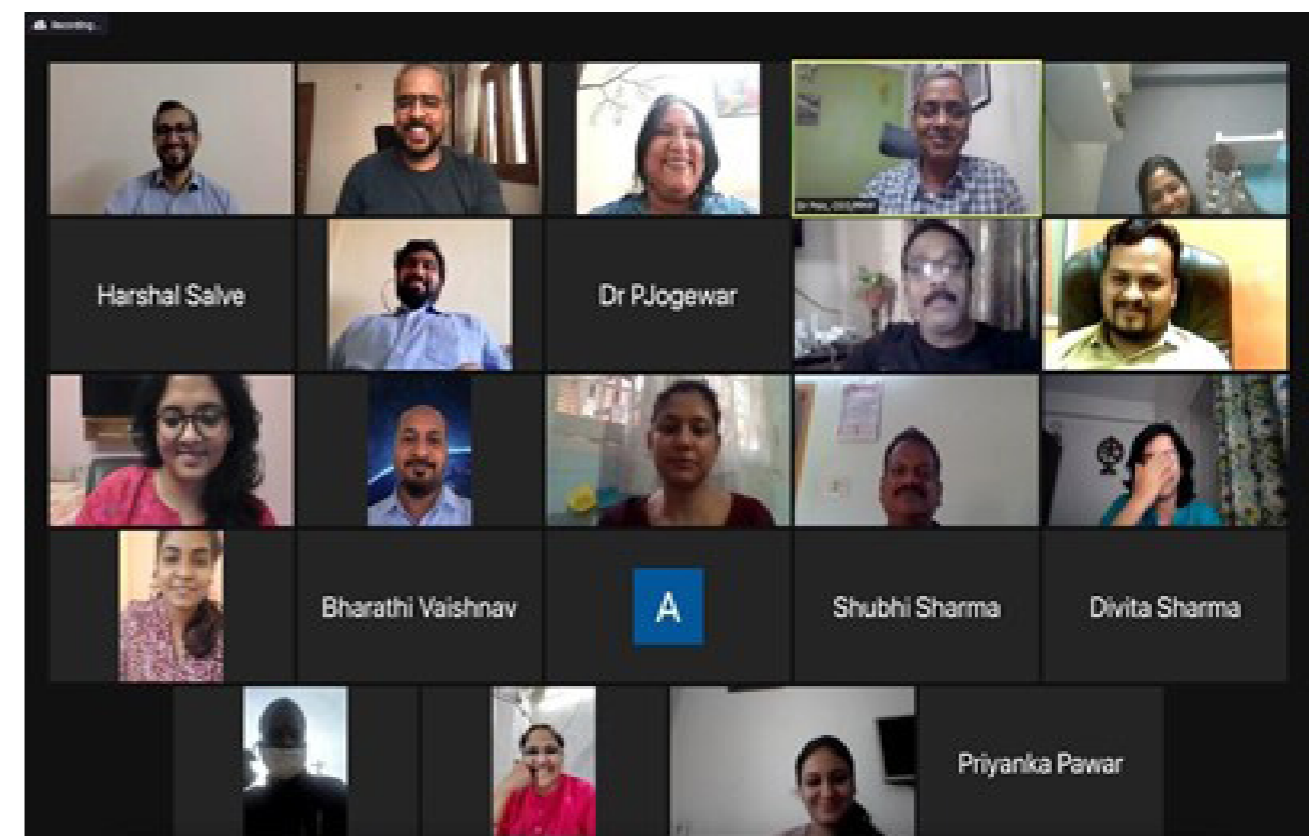
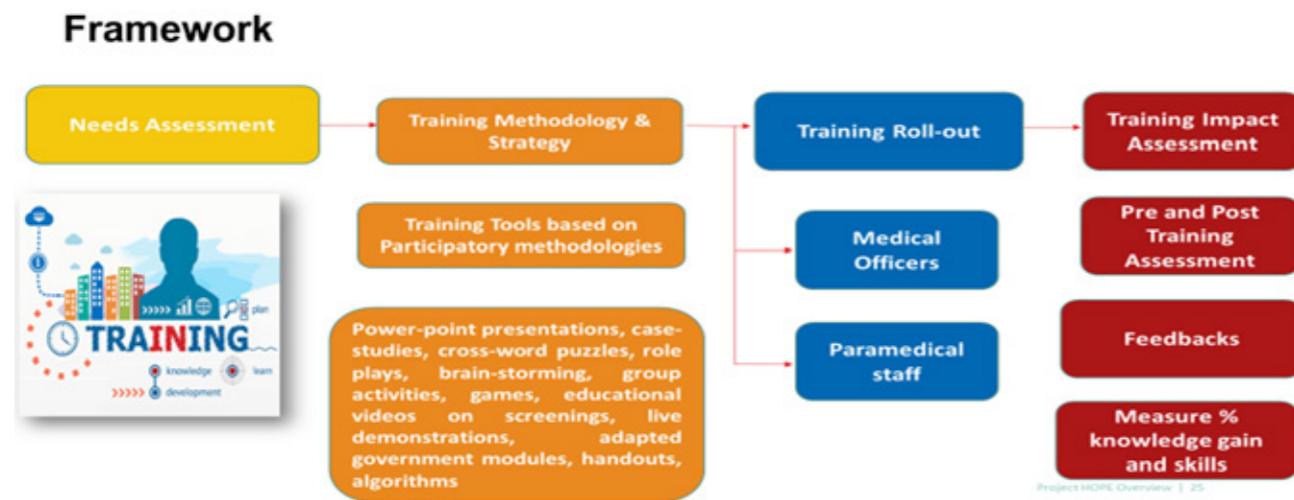


Image 2: TAG members and participants from states and district

**CAPACITY BUILDING:**



**State level Dissemination workshop:**

**Need:** A PPHF had conducted a situational analysis. This was a participatory process with diverse and inclusive involvement of stakeholders from communities and, both the private and public health systems. The intention was to understand NCD-related health problems, community perspectives, barriers and challenges faced by the target audience and the key factors that contribute to these problems. This served as a baseline snapshot of the status of the problem, which was then used to design the program’s activities.

**Specific Activity:** A Dissemination Workshop was organised on 6th December 2021 in Hotel Taj at Abids, Hyderabad with representation from the Telangana health ministry, Sanofi and other local agency and release of summary report of the RFA findings.

**Process Followed:** A summary report of the RFA findings was published and released by representatives from the ministry and Sanofi. Key reports were also shared with stakeholders at the state and district level.

**Outcome:** Summary report of RFA findings published and released. (Annex-I)



Image 3: State Dissemination Workshop

**Training of community mobilisers**

**Need:** This training was conducted to refresh the knowledge of health care professionals on the NCD program. They were trained on the use of ECG machines and BP apparatus.

**Specific Activity:** On 11th January 2022 a workshop was organised for NCD nurses and medical officers to distribute ECG machines, BP apparatus and to train them extensively on use and application of such medical equipment. Dr. Raghu Kishore Galla, a cardiac surgeon based in Hyderabad was invited as a guest speaker to provide training on ECG interpretation.

**Process Followed:** IA group message was

sent to all the participants to notifying them about the venue, date, and training time. Discussion-based training was conducted using PowerPoint by Dr. Kishore Galla followed by questions from the trainees. Following the training, Dr. Kishore Galla created a WhatsApp group with all the medical officers that allows them to post questions about hurdles faced in the interpretation of ECG during their tenure at the intervention sites.

**Outcome:** Increased knowledge, understanding, and application of ECG interpretation and distribution of medical equipment. Increased knowledge and abilities to treat NCDs at the intervention sites. Pictures have been shared in Annex - I



Image 4: Community Mobilisers Training

**Training of medical officers, NCD staff and distribution of ECG machines and BP apparatus**

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Key Highlight of The Year

Key Highlight of The Year

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Image 5: Healthcare Professionals Training on ECG

**Virtual meeting with the community mobilisers/ volunteers**

**Need:** Upon regular data interpretation, gaps and challenges were identified in data entry to Epicollect5 app. The PPHF State team organised a virtual meeting to refresh the knowledge of skills of volunteers on data entry.

**Specific activity:** A virtual meeting on Google meet was scheduled with 50 attendees including the NCD State Program Officer, PPHF State Team, Dr. Vijaya Bhavani from Magna Carta Foundation, and volunteers. District Program Officer of

Medchal – Malkajiri created the meeting invite and shared it with the attendees. The volunteers were also guided on how to achieve their weekly targets during this meeting.

**Outcome:** The training helped to improve their knowledge and skills about data entry and community sensitisation and in turn, increased the efficiency of the project implementation. The Pictures have been shared in Annexure I.

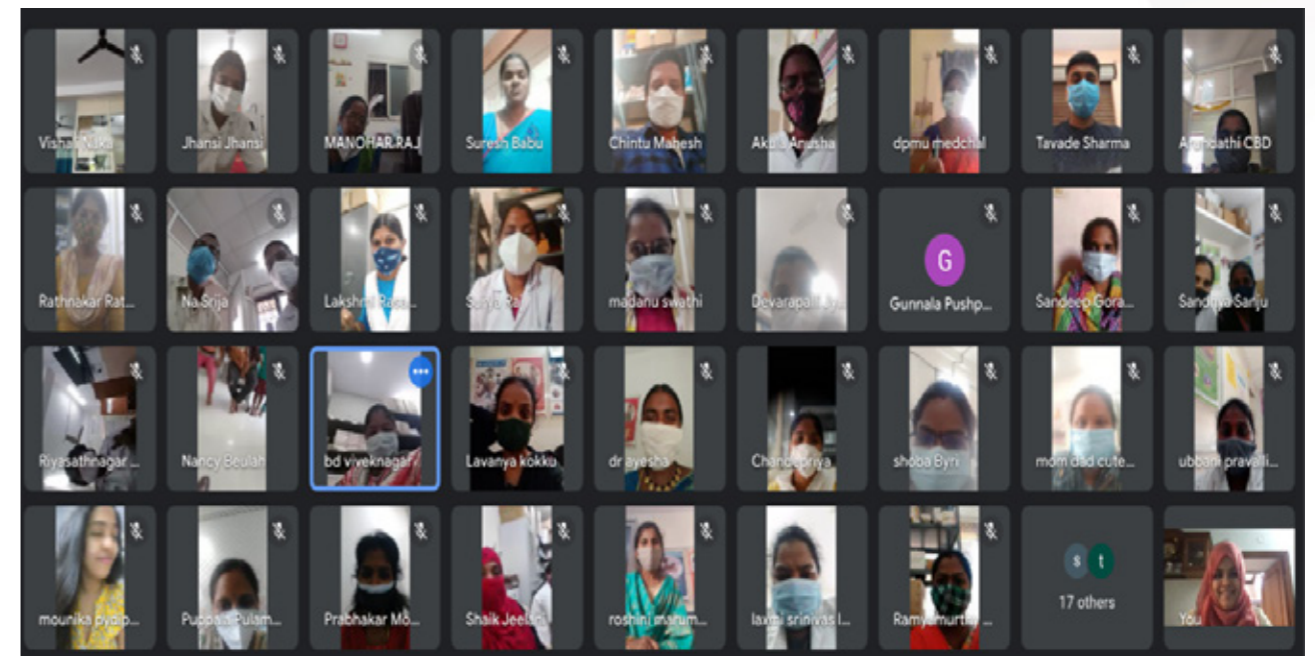


Image 6: Volunteers Virtual Meeting

**Training of Nursing Staff on NCD**

**Need:** A virtual training session was conducted with NCD staff nurses of Medchal – Malkajiri to enhance their skills and capabilities.

**Specific activity:** A virtual training with guest speaker Dr. Sameena Sikander to on the oral cancer – diagnosis and managing referrals was conducted.

**Process followed:** All the nurses were sent a group message asking them to attend this training on 4th February 2022, which also happened to be on World Cancer Day.. During the meeting, a

Google Forms link was shared for pre and post assessment sessions. Dr Sameena Sikander, a dentist from Vishakhapatnam emphasised on the process of history taking and identifying risk factors for oral cancer, and how to refer the patient to higher centres.

**Outcome:** The Pre- and post- assessment score of 42 volunteers was 92% and 99% respectively signifying an increase in knowledge and understanding for delivering care.

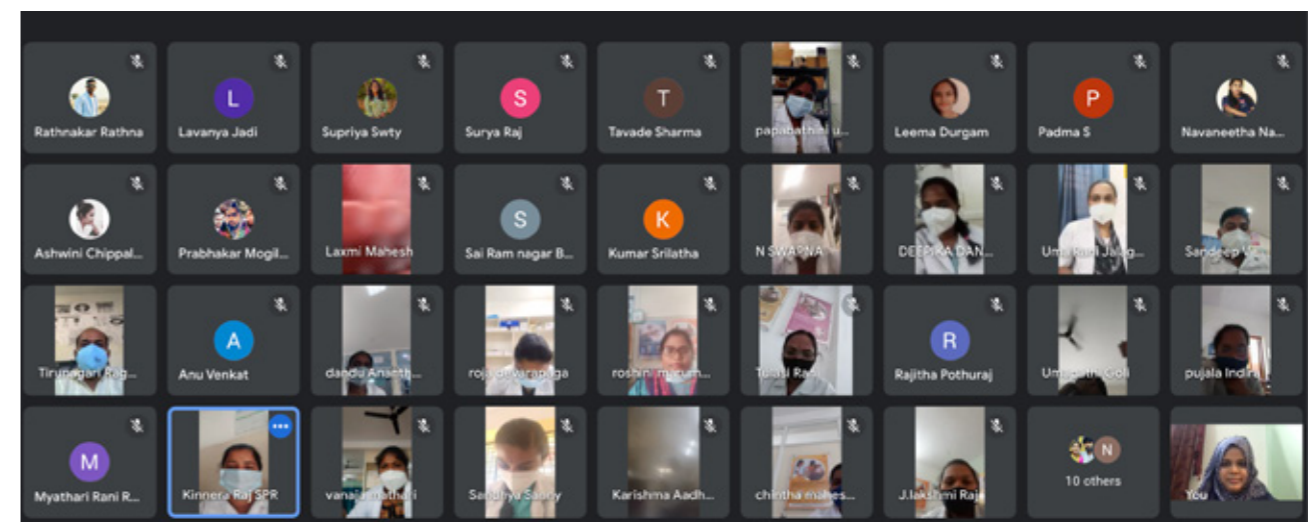


Image 7: Nurses' training

Key Highlight of The Year

Key Highlight of The Year

### Monitoring the program:

The state team along with the NGO Magna Carta Foundation (an organisation responsible for recruiting community mobilisers) conducted field audits at the project sites. A master checklist was developed for the field visits. Apart from

this, a monitoring and evaluation framework was developed by the PPHF State team that measures key output indicators that will, in turn impact the outcome of the project.

### Data collection:

The state team has developed a format for daily entry at each UPHC and Basti Dawakhana. At the end of the day, the mobilisers are asked to do data entry in the EpiCollect5 app. The variables (mentioned in the table below) give insights into daily OPD, the number of people educated about NCDs, screening, diagnosis, and the treatment of NCDs, and if any

patients were referred to higher centres. The MEL Officer at Telangana State conducts a biweekly data analysis and interpretation. At the end of each month, a detailed report on this shall be shared with the TAG team, State Government Officials to ensure the project is on track.

Variable Data Monitored till January 2022	Numbers
The average number of people mobilised at two intervention sites (2 UPHC and 52 BDs)	1300
Number of people screened	10900
Number of people diagnosed with NCD	5600
Number of people enrolled in treatment for diabetes/hypertension	5416
Number of people referred to higher centre	699
Number of people educated about NCD program	10302

## ACHIEVEMENTS AND CHALLENGES

### Achievements:

- Partnerships with the government to address the implementation gaps and share evidence are leading to some sustainable approaches for addressing urban NCDs
- Community mobilisers for NCD through Basti Dawakhana seems a promising model to increase service uptake in the community.
- Creating awareness in the community, bringing the people close to services, and bridging the gaps in supplies and coordination with the district authorities and community is critical.
- Role clarity for screening activities with clear definitions of the roles and responsibilities of the Community Health Workers/ Medical Officers/ Nurses (micro-planning) are important for effective screening.
- A comprehensive package of training manuals, job-aids and Information-Education-Communication (IEC) materials to support the implementors, planners, trainers and health workers helps.
- Screening data has been reported in state HMIS.

### Challenges:

Volunteers drop off despite constant motivation by the PPHF staff and Magna Carta Foundation. The partners are working on ensuring that volunteers are satisfied and motivated to work.

Due to a lack of digital literacy, the community mobilisers occasionally face restrictions in performing their duties. This has been identified at two levels: lack of access to the internet and lack of skills. To overcome this, the mobilisers also get technical support through the WhatsApp group where the MEL Officer of the PPHF Telangana team shares videos, flowcharts and easy to follow instructions on data entry to Epicollect5 app

To abide by safety rules during the third wave, conducting in-person training was a challenge. The PPHF State team and DPO of Medchal district jointly came to the conclusion of doing virtual training.

Norms, values, and beliefs of an individual influence their decision-making to take up treatment, especially the referral cases of cancers.

### PRIORITIES FOR NEXT YEAR

- Refining the community mobiliser model for replication
- Collaboration with State NCD cell to support in conducting least 30 screenings per day at each Basti Dawakhana to reach the State targets
- Support the state to reach the at least 65000
- Supporting the District team in Digitising the patients' records in the Village Health Register (VHR)
- Ensuring all the intervention sites are equipped with BP apparatus and ECG machines
- Refresher Training for healthcare workers

### CONCLUSION

The training, screening and follow-up are important pillars of ASPIRE for impacting at scale. The screening camps uncovered a huge burden of NCDs as well as of the pre-diseased states. Unless strategically intervened with population-wide coverage, the health system and population health indicators will remain vulnerable. The Year 1 implementing experience indicates that population-based screening for NCDs is feasible under the NPCDCS mandate with partner support in urban areas and the engagement of community mobilisers. This can help in delaying the onset of the NCDs, arresting the disease in its early stage

and addressing the stigma related to Breast cancer and Cervical cancer. This will lead to improving prognosis of the diseases, treatment adherence and reversal of the diseases, and possibly in reducing catastrophic out-of-pocket expenditure while establishing continuum of care. Building on the learnings from Year 1 of the program, PPHF with support from Sanofi and in collaboration with state government, will continue working to strengthen supporting NCD service delivery among the urban poor in Hyderabad, capturing a total of 52 Basti Dawakhana and 2 UPHC's.

Key Highlight of The Year

Achievements and challenges



### Annexure -I



Image-8: Basti dawakhana. (Left) Dr. Vijaya from Magna Carta Foundation with one of the medical officers during an interview

Image 9: Basti Dawakhana



Image 11: Training for mobilisers



Image 12: NCD delivery at the Basti Dawakhana

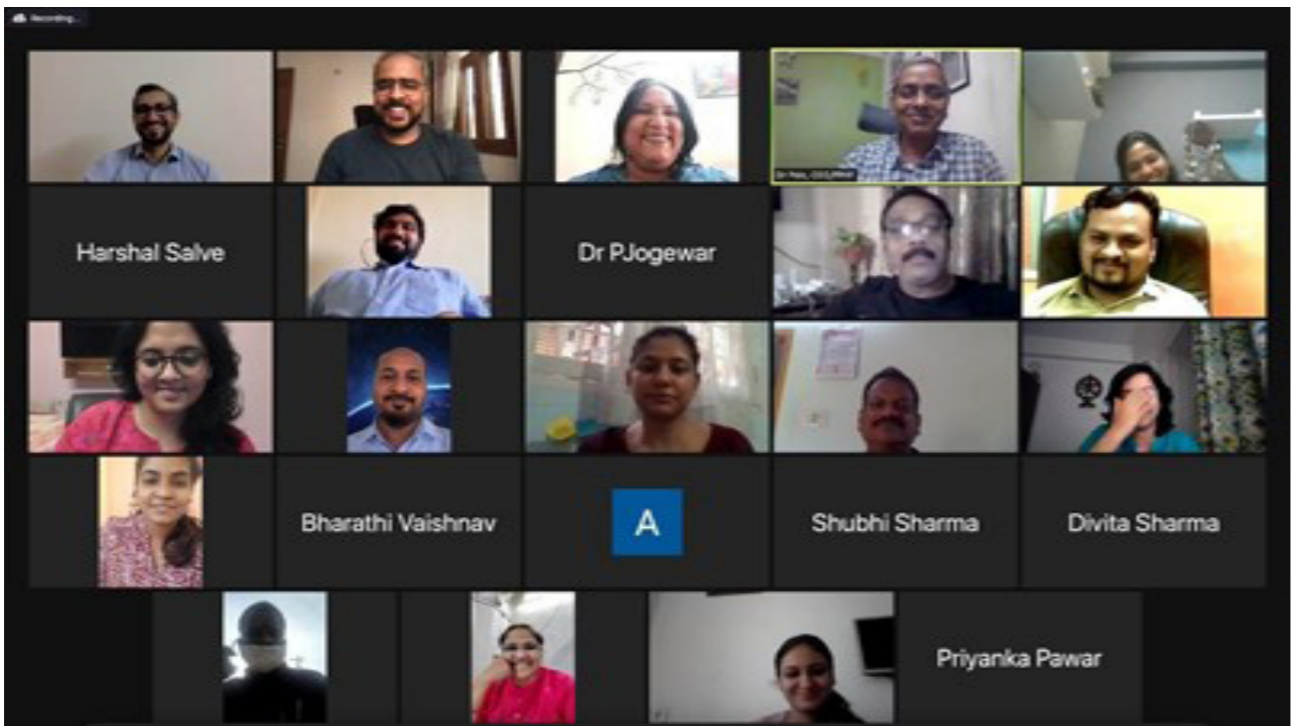


Image 10: TAG members and participants from states and districts attending the TAG meeting

Annexure - I

Annexure - I



Image 13: State Dissemination Workshop at the Taj Mahal – Abids, Hyderabad



Image 14: Training of healthcare professionals on ECG and BP reading

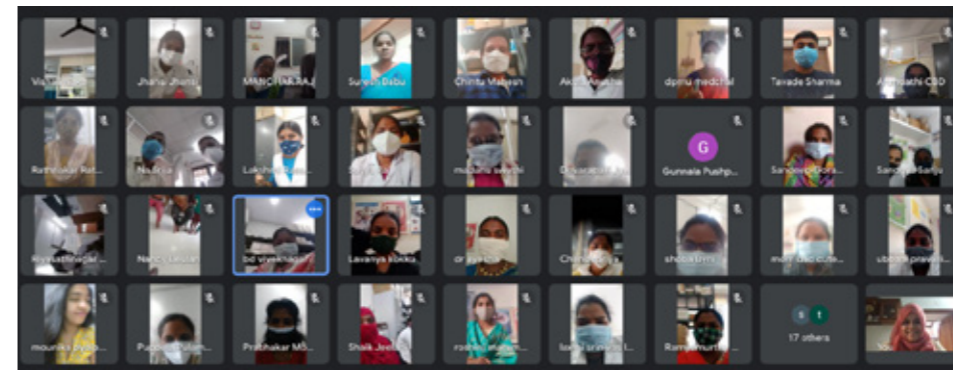


Image 15: Virtual Training of NCD Staff Nurses

Image 16: Volunteers' Virtual Meeting

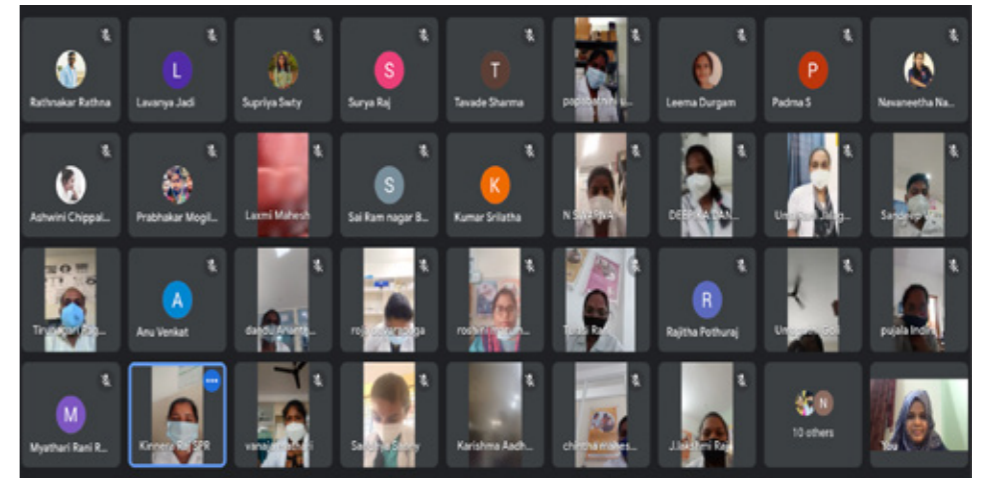


Image 17: Pictures of the Community Mobilisers' Training

### Annex-II: IEC material: Booklet on Diabetes and Hypertension for Community Mobilisers

Annexure - II



మధుమేహం మరియు ధమనీయధికరక జోలును  
 మారణ మరియు నొరవహణ -  
 కమ్యూనిటీ ఆరోగ్య కార్యకర్తల పాత్ర



## Non Communicable Diseases Program

Govt. of Telangana

### Type II Diabetes Management Protocol

Parameter	Diagnosis of diabetes	Treatment targets
Fasting Blood Sugar (FBS)	≥126mg/dL	<126mg/dL
Random Blood Sugar (RBS)	≥200mg/dL	<200mg/dL
Post-Prandial Blood Sugar (PPBS)	≥200mg/dL	<160mg/dL
HbA1c	≥6.5%	<7%

*If (FBS ≥126 and <400 mg/dL) OR (RBS or PPBS ≥200 and <400mg/dl) OR (HbA1c ≥6.5% and <11%)*

**STEP 1** Tab. Metformin 500 mg OD or BD after food

**STEP 2** Review after 1 month and if BS above target  
 Increase Tab. Metformin 1000 mg/day twice daily

**STEP 3** Review after 1 month and if BS above target  
 Add Glimepiride 1 mg/day once daily ½ hr before breakfast, if hypoglycemia occurs, reduce to 0.5 mg

**STEP 4** Review after 1 month and if BS above target  
 Increase Glimepiride to 1 mg twice daily

**STEP 5** Review after 1 month and if BS above target  
 Titrate Glimepiride up-to 4 to 6 mg per day

**STEP 6** Review after 1 month and if BS above target  
 Refer to specialist

Note: If SGLT-2 is generally not started at PHC but if patient is already taking then it can be continued

**Important considerations**

- If BS >400 mg/dL or HbA1c >11%, refer directly to specialist
- If patient has uncontrolled infection or comorbid CAD, CKD, diabetic foot ulcer or urine ketones, refer directly to specialist
- If patient is pregnant, refer directly to Ob-Gyn
- Review medication adherence prior to increasing step
- When starting glimepiride:
  - Monitor for hypoglycemic symptoms at all visits and stop glimepiride if present
  - Provide counseling to watch for hypoglycemic symptoms: sweating, confusion, palpitations, dizziness and take sugar orally. Advise to take with food and not to take glimepiride on fasting days/skipping meals
  - Diabetic retinopathy: screen retina once in 6 months, refer if any eye symptoms or positive exam
  - Diabetic neuropathy: examine feet on every visit, refer if abnormal exam
  - Diabetic nephropathy: screen urine protein and serum creatinine once in every 6 months, refer if proteinuria++ and Cr >1.5
  - Lipid profile once in every 6 months for cardiovascular risk. Provide lifestyle advice for all patients

*If PPPG is high increase morning dose, if FPG is high increase evening dose*

**Notes**

1. OD (once daily), BID (twice daily), SR (sustained release), SR (SR) tablets are recommended. If there are several tablets, the same total dosage may be divided into 2 or 3 tablets daily. For example, at protocol Step 2, 1000 mg daily dose given as metformin 500 mg twice daily (BID).

**Hypoglycaemia**

Symptoms: Cold sweat, trembling of hands, hunger, palpitation, confusion etc.

Treatment: 15 gm of glucose (i.e. 1 tablespoon sugar or high carbohydrate containing foods). Recheck blood sugar after 15 mins. Repeat if hypoglycaemia continues.

**Commissioner**  
 Health and Family Welfare  
 Govt. of Telangana

Annexure - II



# Telangana Hypertension Protocol



Measure blood pressure of **all adults over 30 years**



**High BP: SBP ≥ 140 or DBP ≥ 90 mmHg**

Check for compliance at each visit before titration of dose or addition of drugs

- Step 1** If BP is high:\*  
**Prescribe Amlodipine 5mg**
- Step 2** After 30 days measure BP again. If still high:  
**Increase to Amlodipine 10mg**
- Step 3** After 30 days measure BP again. If still high:  
**Add Telmisartan 40mg**
- Step 4** After 30 days measure BP again. If still high:  
**Increase to Telmisartan 80mg**
- Step 5** After 30 days measure BP again. If still high:  
**Add Chlorthalidone 12.5mg\*\***
- Step 6** After 30 days measure BP again. If still high:  
**Increase to Chlorthalidone 25mg\*\***



After 30 days measure BP again. If still high:  
Check if the patient has been taking medications regularly and correctly. If yes, refer to a specialist.

**Pregnant women and women who may become pregnant**

- ▲ DO NOT give Telmisartan or Chlorthalidone.
- Statins, ACE inhibitors, angiotensin receptor blockers (ARBs), and thiazide/thiazide-like diuretics should not be given to pregnant women or to women of childbearing age not on effective contraception.
- Calcium channel blocker (CCB) can be used. If not controlled with intensification dose, refer to a specialist.

**Diabetic patients**

- Treat diabetes according to protocol.
- Aim for a BP target of < 140/90 mmHg.

**Heart attack in last 3 years**

- Add beta blocker to Amlodipine with initial treatment.

**Heart attack or stroke, ever**

- Begin low-dose aspirin (75mg) and statin.

**Chronic kidney disease**

- ACEI or ARB preferred if close clinical and biochemical monitoring is possible.

- \* If SBP ≥ 180 or DBP ≥ 110, refer patient to a specialist after starting treatment.
- If SBP 160-179 or DBP 100-109, start treatment on the same day.
- If SBP 140-159 or DBP 90-99, check on a different day and if still elevated, start treatment.

- \*\* Hydrochlorothiazide can be used if Chlorthalidone is not available (25 mg starting dose, 50 mg intensification dose).

Recommended investigations at initiation of therapy: Haemoglobin, blood sugar, urine analysis for proteinuria, serum creatinine.

**Lifestyle advice for all patients**



- Eat 5 servings of fruits and vegetables per day.
- Avoid papads, chips, chutneys, dips, pickles etc
- Use healthy oils like sunflower, mustard, groundnut, etc
- Limit consumption of foods containing high amounts of saturated fats.
- Reduce fat intake by changing how you cook:
  - Remove the fatty part of meat
  - Use vegetable oil
  - Boil, steam, or bake instead of fry
  - Limit reuse of oil for frying
- Avoid processed foods containing trans fats.
- Avoid added sugar.



## DIABETIC FOOD CHART

Time	Meal Type	Food Products
7:30 AM	Tea	• 1 cup of tea with skim milk and without sugar
8-9:00 AM	Breakfast	• 2 chapathi (or) • 2 IDLY (or) • 1 Dosa
12:30 PM	Lunch	• 1 cup of Rice • ½ cup spinach <i>curry</i> or any leafy veg • 1 cup of <i>rajmah</i> (or) <i>Dal</i> • ¼ cup of baked/pan-fried fish/chicken or 1 boiled egg Chicken- Once in week Mutton- Once in Month Fish- Once in week Egg- Twice In week
4:00 PM	Afternoon snack	• 1 cup of tea with skim milk and without sugar • ¼ cup of mixed nuts (or) • 1 Cup of fruits
8:00 PM	Dinner	• 2 rotis without ghee • ½ cup of <i>chole</i> (or) • 1 cup of cauliflower (or) any vegetable
9:30 PM	Snack	• 1 fresh fruit without sugar (or) • 1 glass of butter milk without salt

## RECOMMENDED FRUITS AND VEGETABLES

FRUITS	VEGETABLE
<p>Advice to eat:</p> <ul style="list-style-type: none"> <li>• Apple (half apple a day)</li> <li>• Grapes (10-20/day)</li> <li>• Lime (1-2)</li> <li>• Pineapple (2-3 Pieces)</li> <li>• Fig (1)</li> </ul>	<ul style="list-style-type: none"> <li>• tomato,</li> <li>• cucumber</li> <li>• cabbage</li> <li>• carrot</li> <li>• capsicum and</li> <li>• green leafy vegetables</li> </ul>
<p>Avoid to eat:</p> <ul style="list-style-type: none"> <li>• Mango</li> <li>• Watermelon</li> <li>• Fruit Juice with Sugar</li> <li>• Packed juices</li> </ul>	<ul style="list-style-type: none"> <li>• Oils</li> <li>• Potato and sweet potato</li> <li>• Soda</li> <li>• Pickles and Fermented Products</li> <li>• Chocolates</li> </ul>



సమయం	భోజనం	ఆహారపదార్థములు
7:30 AM (ఉదయం)	టీ	చక్కెర లేని ఒక కప్పు టీ
8-9:00 AM (ఉదయం)	అల్పాహారం	2 చపాతీ (లేదా) • 2 ఇడ్లీ (లేదా) • 1 దోస
12:30 PM (మధ్యాహ్నం)	మధ్యాహ్నం భోజనం	1 కప్పు అన్నం • ½ కప్పు చుల్లికూరకూర • 1 కప్పు రాజ్జూ (లేదా) పప్పు • ¼ కప్పు లెన్/వేయించిన చేప/కోడిలేదా 1 ఉడికించిన గుడ్డు చికెన్ - వారానికొకసారి మటన్ - నెలకు ఒకసారి చేపలు - వారానికొకసారి గుడ్డు - వారానికొకసారి
4:00 PM (సాయంత్రం)	మధ్యాహ్నం సాక్షి	చక్కెర లేని ఒక కప్పు టీ 1/4 కప్పు డ్రై ఫ్రూట్స్ (లేదా) 2 బిస్కెట్లు 1 కప్పు పండ్లు
8:00 PM (రాత్రి)	రాత్రి భోజనం	నెయ్యి లేకుండా 2 రోటీలు మరియు ½ కప్పు సెనగలు కూర (లేదా) 1 కప్పు కూర (శాకాహారం)
9:30 PM (రాత్రి)	అల్పాహారం	చక్కెర లేని 1 తాజా పండు రసం (లేదా) ఉప్పు లేకుండా 1 గ్లాసు మజ్జిగ

సిఫార్సు చేయబడిన పండ్లు మరియు కూరగాయలు

పండ్లు	కూరగాయలు
<p><b>తినవలసినవి</b></p> <ul style="list-style-type: none"> <li>• ఆపిల్ (రోజుకు సగం ఆపిల్)</li> <li>• ద్రాక్ష (10-20/రోజు)</li> <li>• నిమ్మకాయ (1-2)</li> <li>• పైనాపిల్ (2-3 ముక్కలు)</li> <li>• అత్తి (1)</li> </ul>	<ul style="list-style-type: none"> <li>• టమోటా</li> <li>• దోసకాయ</li> <li>• క్యాబేజీ</li> <li>• కారెట్</li> <li>• క్యాప్సికమ్ మరియు</li> <li>• ఆకుపచ్చ ఆకు కూరలు</li> </ul>
<p><b>తినకూడనివి</b></p> <ul style="list-style-type: none"> <li>• మామిడి</li> <li>• చక్కెరతో పండ్ల రసం</li> <li>• ప్యాక్ చేసిన రసాలు</li> <li>• పుచ్చకాయ</li> </ul>	<ul style="list-style-type: none"> <li>• నూనెలు</li> <li>• సోడా</li> <li>• ఊరగాయలు మరియు పులియబెట్టినవి</li> <li>• చాక్లెట్లు</li> <li>• బంగాళదుంప మరియు చిలగడదుంప</li> </ul>

# ORAL CANCER

## WHAT IS IT??



Cancer occurring in the tissues of the mouth from lips to the back of tonsils and throat. Affected areas range from lips to gums, roof and floor of the mouth



Fifth most common cancer in women

Most common cancer in men

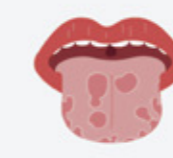


The five year survival rate is above 80%

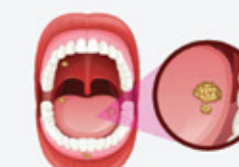
## SIGNS AND SYMPTOMS



Ulcer that does not heal within three weeks



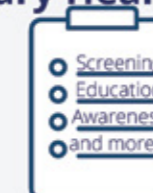
Red/white patches in mouth



Swelling or growth in mouth

## DETECTING ANY OF THESE ??

Visit nearest Basti dawakhana or Urban Primary Health Center for



## WHAT CAN I DO TO PREVENT ??



Limit use of alcohol



Avoid chewing tobacco



Avoid smoking cigarettes and pipes



Maintain healthy diet and lifestyle like consuming at least 5 groups of fruits and vegetables a day coupled with at least 20 minutes of physical activity







**For more info:**

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K-40, 3rd floor, Jangpura Extension, New Delhi 110014  
E-mail: [info@phfindia.org](mailto:info@phfindia.org) | Phone: 011-35121441 ([www.pphf.in](http://www.pphf.in))