Health and Wellness Centres: Expanding Access to Comprehensive Primary Health Care in India

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Table of Contents

Table of Figures

Table of Tables

Abbreviations

HWC	Health and Wellness Centre
SC	Sub Centre
PHC	Primary Health Centre
CHC	Community Health Centre
CVD	Cardiovascular Disease
DH	District Hospital
FRU	First Referral Unit
UHC	Universal Health Coverage
GoI	Government of India
ICT	Information and Communications Technology
IT	Information Technology
PMJAY	Pradhan Mantri Jan Arogya Yojana
PMRSSM	Pradhan Mantri Rashtriya Swasthya Suraksha Mission
NCD	Non-communicable Disease
CD	Communicable Disease
ENT	Ear Nose and Throat
SECC	Socio Economic and Caste Census
RMNCH+A	Reproductive, Maternal, New-born, Child and Adolescent Health
VHSNC	Village Health Sanitation and Nutrition Committee
VHND	Village Health and Nutrition Day
MLHP	Mid-Level Health Provider
MPW	Multi-Purpose Worker
ASHA	Accredited Social Health Activist
ANM	Auxiliary Nurse Midwife
CPHC	Comprehensive Primary Health Care
NHS	National Health Stack
MMU	Mobile Medical Units
ICDS	Integrated Child Development Services
ICPS	Integrated Child Protection Scheme
IGMSY	Indira Gandhi Matritva Sahyog Yojana

Abstract

India's achievements in the field of health leave much to be desired and the burden of disease among the Indian population remains high. Infant and child mortality and morbidity and maternal mortality and morbidity affect millions of children and women. IMR at 37 per 1,000 live births and MMR at 130 per 100,000 live births are high by international standards, and life expectancy at around 68 years is much lower than in China, other countries in East Asia, and the advanced economies. Fertility rates are still very high, and the population continues to grow rapidly, pressing hard on India's fragile ecosystems and natural environment.

Several infectious diseases are re-emerging as epidemics. Many of these illnesses and deaths can be prevented and/or treated cost-effectively with primary health care services provided by the public health system. An extensive primary healthcare infrastructure provided by the government exists in India. Yet, it is inadequate in terms of coverage of the population, especially in rural areas, and grossly underutilized because of the dismal quality of healthcare being provided. In most public health centers which provide primary healthcare services, drugs and equipment are missing or in short supply, there is shortage of staff and the system is characterized by endemic absenteeism on the part of medical personnel due to lack of control and oversight.

As a result, most people in India, even the poor, choose expensive healthcare services provided by the largely unregulated private sector. Not only do the poor face the double burden of poverty and ill-health, the financial burden of ill health can push even the non-poor into poverty. Among the 50 low-middle income group nations, India is the 6th biggest out-of-pocket spender. The household out-of-pocket expenditure accounts for 67 percent of the total health expenditure.

Last year, the Government of India embarked on a path to achieve Universal Health Coverage for all the citizens of India. In the Union budget 2017-18, the government announced the Ayushman Bharat Yojana, comprising of two major initiatives – the National Health Protection Scheme and the Health and Wellness Centres (HWCs).

The present paper gives a detailed account of the Health and Wellness Centres Initiative under Ayushman Bharat Yojana launched by the government. The role of Information and Communications Technology (ICT) in the delivery of comprehensive primary health care through HWCs is examined. Further, the areas of opportunities and key challenges related to the Health and Wellness Centres Initiative is discussed in detail.

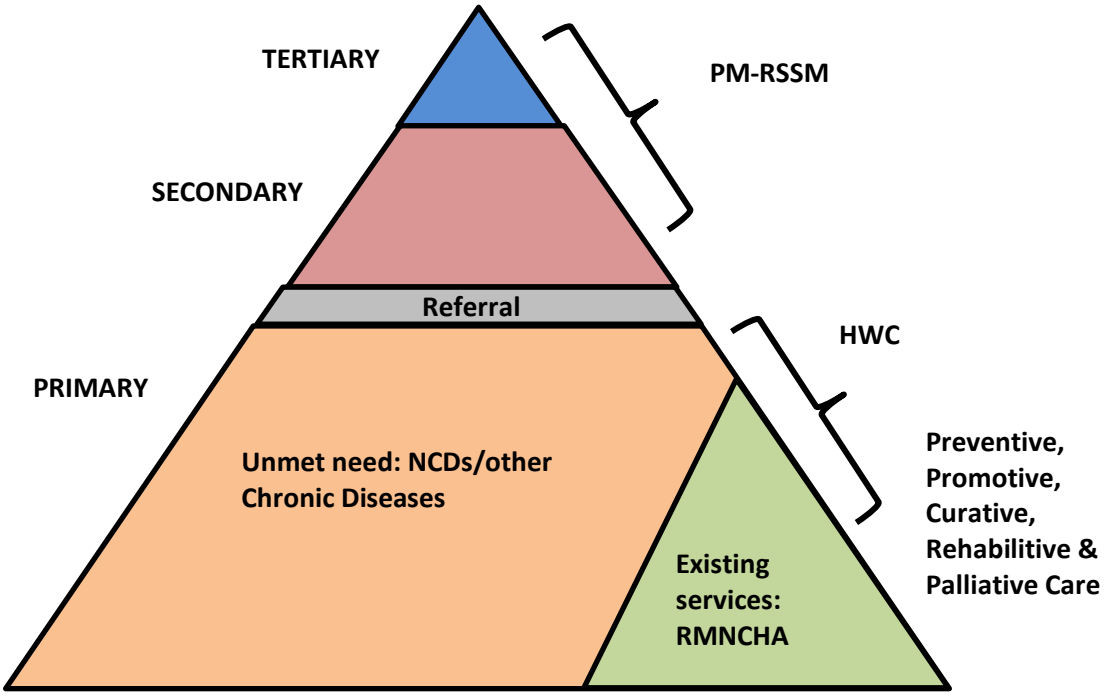
While we conclude that the newly designed HWCs initiative has several novel features that have the potential to vastly benefit the rural populations, at the same time it is critical to keep in mind the following broad issues if the HWCs have to succeed on scale: 1) a much higher level of public health spending in general and much higher outlays for HWCs in particular; 2) proper recruitment, comprehensive training, effective control and oversight and timely and adequate payments for the various health functionaries; 3) an effective and efficient management structure for the HWCs; and 4) commensurate physical infrastructure and human resources in the sub-centers and the Primary Health Centers converted into the HWCs with the growing needs of the regions.

Keywords: Health and Wellness Centres, Ayushman Bharat, Information and Communications Technology, ICT, India

Introduction

In the Union budget 2018-19, Government of India announced the Ayushman Bharat Yojana (also called Pradhan Mantri Jan Arogya Yojana (PMJAY)). Ayushman Bharat Yojana is a key initiative undertaken by the Government of India to achieve Universal Health Coverage. Ayushman Bharat adopts a continuum of care approach and aims to address health holistically at all the levels –Primary, Secondary and tertiary. It comprises of two major initiatives, namely, Pradhan Mantri Rashtriya Swasthya Suraksha Mission (PMRSSM) or the National Health Protection Scheme and the Health and Wellness Centres (HWCs)[1]. Figure 1 illustrates the rationale behind Ayushman Bharat Yojana[2](Lahariya 2018).

Figure 1: Ayushman Bharat Yojana



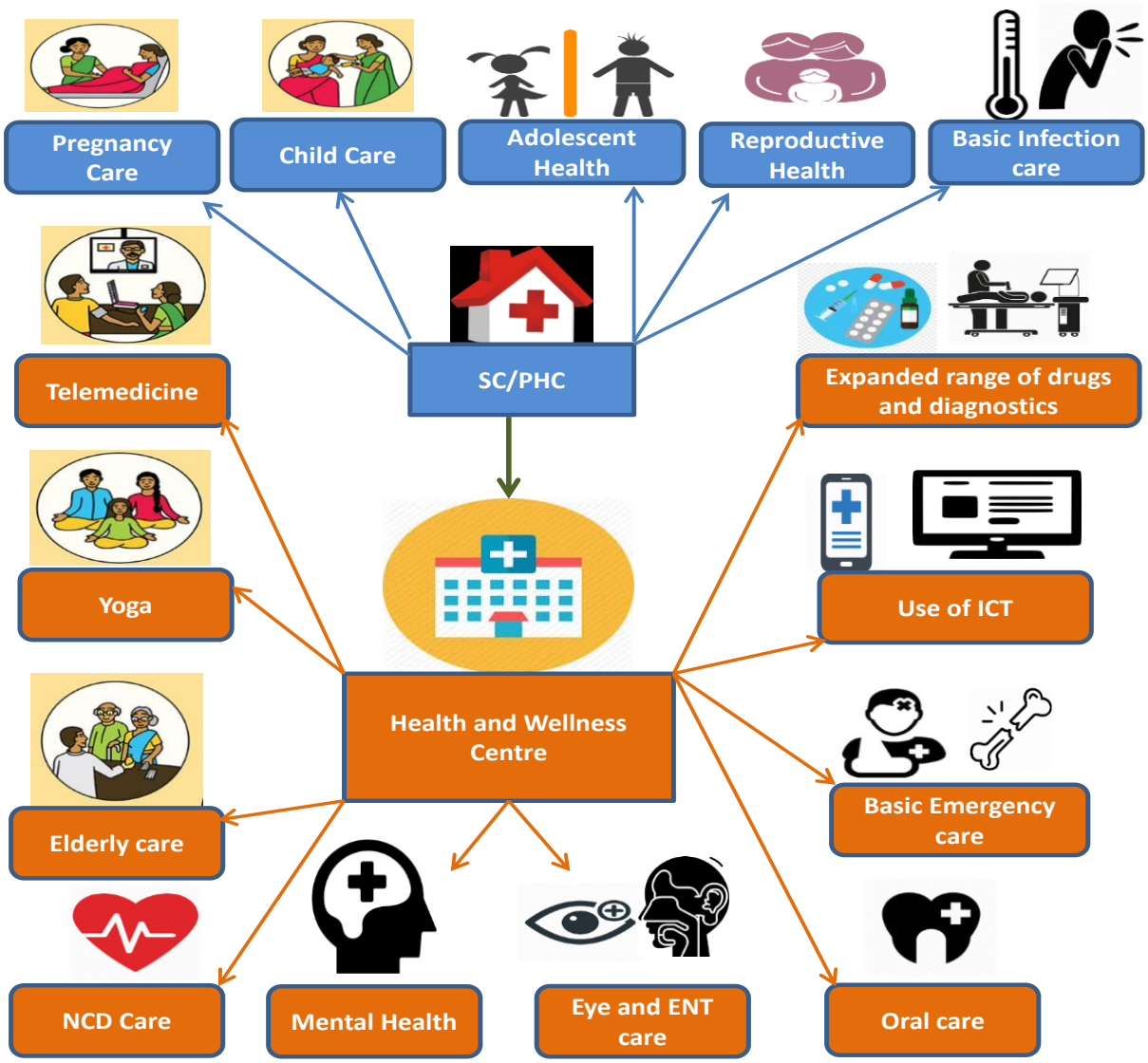
Source: Lahariya, Chandrakant. 2018. "Ayushman Bharat Program and Universal Health Coverage in India." *Indian Pediatric* 55: 495–506.

PMRSSM was approved by the cabinet on 21st March 2018[3]. This scheme provides health insurance cover of Rs. 500,000/family/year for secondary and tertiary hospitalisation[3](Press Information Bureau ,Ministry of Health and Family Welfare 2019a). This initiative will benefit around 107 million poor and vulnerable families (approx. 500 million beneficiaries) (Press Information Bureau ,Ministry of Health and Family Welfare 2019a). Around 23 million Urban Households are targeted under the PMRSSM. These households have been identified as per Socio Economic and Caste Census (SECC 2011) and are based on 11 categories (Ministry of Health & Family Welfare, Government of India 2018) (see Annexure 1).

[1] https://en.wikipedia.org/wiki/Ayushman_Bharat_Yojana
[2] https://indianpediatrics.net/june2018/june-495-506.htm
[3] https://www.pmjay.gov.in/sites/default/files/2018-07/Presentation_Urban_ADCD_Rev1.pdf

In February 2018, Government of India announced HWC initiative under Ayushman Bharat Yojana (NHSRC 2018). Under this initiative, 150,000 Sub Centres (SCs) and Primary Health Centres (PHCs) will be strengthened as Health and Wellness Centres. Currently, the SCs and PHCs meet only 20% of health care needs and provide services limited to reproductive, maternal, new-born, child and adolescent health (RMNCH+A) and some communicable disease management. Under the Health and Wellness Centre initiative, these Sub Centres and Primary Health Centres will be upgraded to handle non-communicable diseases (NCDs) like cancer, CVD, diabetes and respiratory diseases, mental illnesses and other chronic diseases, as these are currently the major cause of mortality and morbidity due to the epidemiological transition. These Health and Wellness Centres will provide wider range of free drugs and diagnostics, services related to elderly care, oral health, Ear, Nose and Throat (ENT) care, eye care and basic emergency care in addition to the RMNCH+A and basic infection care. Figure 2 shows the transformation from the existing Sub centres and Primary Health Centres to Health and Wellness Centres.

Figure 2 : Transforming Sub centres and Primary Health Centres to Health and Wellness Centres



The key principles underlying the establishment of Health and Wellness Centres are given in Annexure 2. The idea of revamping the health system at the grass root level will make available many health services (which are currently delivered only at district or state level hospitals) at the SC and PHC levels. These SCs and PHCs will be strengthened to provide an essential package of twelve Comprehensive Primary Health Care (CPHC) services. Figure 3 lists the 12 Comprehensive Primary Health Care Services to be delivered at Health and Wellness Centres. A detailed list of care under each of the twelve comprehensive primary health care services is given in Annexure 3.

The principle behind providing these essential package of twelve services is to bring "time to care" to not more than 30 minutes (NHSRC 2018). This may also contribute to reduction of morbidity and mortality burden due to many chronic and non-communicable diseases, promote healthier life style, save money which is currently spent to get these services at the district/state level hospitals, create employment opportunities and also reduce the patient load at the district and state level hospitals.

Figure 3 : List of Comprehensive Primary Health Care Services

Comprehensive Primary Health Care Services

i. Care in pregnancy and child-birth
ii. Neonatal and infant health care services
iii. Childhood and adolescent health care services
iv. Family planning, Contraceptive services and other Reproductive Health Care services
v. Management of Communicable diseases including National Health Programme
vi. Management of Common Communicable Diseases and Outpatient care for acute simple illnesses and minor ailments
vii. Screening, Prevention, Control and Management of Non-Communicable diseases
viii. Care for Common Ophthalmic and ENT problems
ix. Basic Oral health care
x. Elderly and Palliative health care services
xi. Emergency Medical Services
xii. Screening and Basic management of Mental health ailments

Source: NHSRC.2018. Operational Guidelines for Comprehensive Primary Health Care through Health and Wellness Centres.

Health promotion and provision of information to the community will be an integral part of the Comprehensive Primary Health Care through Health and Wellness Centres. For this purpose, various agents like ASHA workers, Mid-level health Providers, School teachers (also known as Ayushman Ambassadors or the Health and Wellness Ambassadors) and various platforms such as, Village Health Sanitation and Nutrition Committee (VHSNC), Mahila Arogya Samitis, Self-Help Groups, Women Collectives, Patient Support Groups etc will be utilised. Further, indigenous health system (AYUSH) and Yoga will also be mainstreamed into the healthcare system. Intersectoral convergence will be one of the key objectives in the delivery of Comprehensive Primary Health Care through Health and Wellness Centres.

Service Delivery Framework

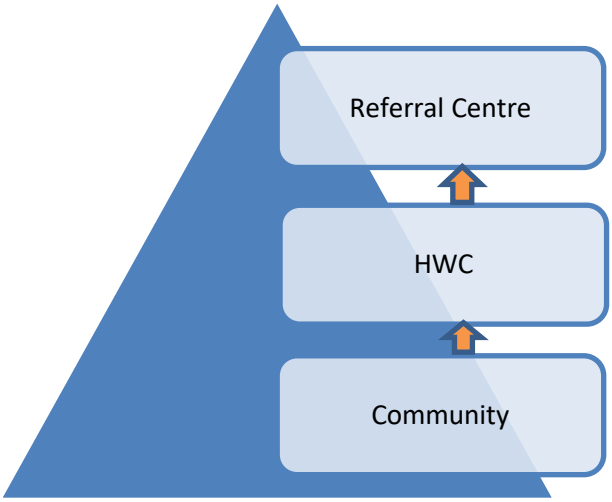


Figure 4 : Service Delivery Framework

(Source: NHSRC.2018. Operational Guidelines for Comprehensive Primary Health Care through Health and Wellness Centres.)

A three tier service delivery framework is proposed at the HWC (see figure 4). First, the family/household and community level services, which will be delivered by ASHAs and MPWs. Community platforms such as, Village Health Sanitation and Nutrition Committees, Village Health and Nutrition Days (VHNDs), Mahila Arogya Samities, would also be leveraged. Second, services will be delivered at the HWC. As a norm, the HWC must be kept open with services availability for at least six hours/day. Third, the referral centres which can be a Primary Health Centre, Community Health Centre (CHC) or a District Hospital (DH)/FRUs depending on the type and severity of the illness.

Each of the Sub centre strengthened as Health and Wellness Centre will have a primary healthcare team lead by a Mid-Level Health Provider (MLHP) and comprising of one Multi-Purpose Worker (MPW) male, two Multi-Purpose Workers (MPW) female and five ASHAs as outreach team. Sub centres upgraded as Additional PHCs will also be transformed to HWCs. Each of the Primary Healthcare Centre will function both as a Health and Wellness Centre and as a first point of referral for a cluster of Health and Wellness Centres in its area. Each of the Primary Health Care Centre strengthened as Health and Wellness Centre will have a primary healthcare team lead by a Medical Officer and comprising of one staff nurses, one lab technician, one pharmacist and a Lady Health Visitor. The level of complexity of care at the PHC-HWC will be higher than the SC-HWC. The block PHCs and CHCs will serve as a referral centre. FRUs (First Referral units) will be established in a phased manner. Only high risk and serious cases will be referred to FRU/District Hospital.

In some states, Community Health Centre at the block level may act as a first point of referral for HWCs under its jurisdiction. In the urban areas, urban Primary Health Centre or Urban Health post (where they exist) will be strengthened as HWC. The norm of one MPW-(F) per 10,000 population supported by four-five ASHAs will suffice out-reach and community-based services. So, in the urban context, the team of ANM and ASHA would be equivalent to a frontline provider team with UPHC as the first point of referral catering to around 50,000 populations.

Key Elements of Health and Wellness Centres

Figure 5 illustrates key elements of Health and Wellness Centres. These include continuum of care from primary to secondary and tertiary levels through the referral mechanism and use of telemedicine technology, expanded range of health care services, human resources and their training/multi-skilling, expanded ranges of medicines and diagnostic equipment, infrastructure to deliver CPHC services, health promotion and community mobilization activities, sufficient funds, robust IT system to meet the needs of all the stakeholders and strong partnership and networks for sharing knowledge and disseminating information.

Figure 5 : Key Elements of Health and Wellness Centres (HWCs)

Source: NHSRC.2018. Operational Guidelines for Comprehensive Primary Health Care through Health and Wellness Centres.

Use of Information and Communication Technology (ICT) in Health and Wellness Centres

A visionary digital framework, "the National Health Stack (NHS)", has been planned at the national and the state level (NITI Aayog 2018). This envisioned IT infrastructure will help achieve continuum of care across primary, secondary and tertiary levels. Though conceptualized to be built in the context of Pradhan Mantri Rashtriya Swasthya Suraksha Mission under Ayushman Bharat Yojana, NHS will be designed beyond PMRSSM to create a holistic platform supporting various health verticals and their branches at national and state levels, both in public and private domain. An IT system inter-operable with the digital architecture at the national and state level is envisioned at the Health and Wellness Centres. Key functions of the IT system at the HWCs are given in Table 1. Key requirements of the IT system at the HWCs are given in Annexure 4.

Table 1 : Key functions of the IT System at the HWCs

Key functions of the IT system at the HWCs
Registration
• Create database of all individuals and families in the catchment area and update this database regularly when there is a new entrant into this area, or someone exits • Empanel all individuals residing in the catchment area and those become newly resident in this areas • Facilitate identification and registration of beneficiaries/ families for National Health Protection Mission as per laid down criteria. • Ensure that every family and individual have been allotted and are aware of their unique Health ID - which would also be used to seek services under various programmes such as RCH/ RNTCP/ NVBDCP etc and support beneficiaries to seek services under the AB-NHPM • Link the unique health ID with the AADHAAR ID at the back end in line with the current statute and SC directions • Identify and merge duplicates by verifying IDs • Create a longitudinal health record of each registered individual
Service Delivery
• Record all services that are delivered at the HWC under different programmes • Enable follow up of services that individual patients are receiving- by recording relevant parameters, diagnostic results, medication given etc. • Send SMS/ reminders to individuals about the follow up visits • Facilitate clinical decision making for the service providers (based on standard treatment protocols) • Track and support upward and downward referrals to support continuity of care. • Ability of print key summary and prescription based on individual's requirement
Management of Service Delivery
• Capture service delivery coverage and measure health outcomes using population based Analytics • Generate work plans for the teams with alert and reminder feature for services providers to support scheduling of appointments, follow up home visits and outreach activities • Use the service delivery data to validate use of services and enable Direct Bank Transfers to beneficiaries wherever required • Support Birth and death registrations and disease surveillance • Capture record of other preventive and promotive services delivered- like vector control etc

• Send appropriate IEC/BCC messages
Logistics
• Support Inventory management and regular supply of medicines, vaccines and consumables by linking with DVDMS – Drugs and Vaccines Delivery Management System • Support biomedical equipment maintenance of all equipment by maintaining database for equipment at HWC
Capacity Building
• Provide Job aids (in the form of flow charts or audio/ video aids) for continuous learning and support of the primary health care team • Support access to Massive open online courses (MOOC) and use of platform such as ECHO for regular capacity building and problem solving for HWC teams both at SHC and PHC level
Reporting and Monitoring
• Generate population-based analytics reports for routine monitoring and to assess performance of health care providers • Support in generating performance matrix for all service providers, calculating team-based incentives from the service transaction data in the system.
Teleconsultation
• Capture and transmit images, prescriptions and diagnostic reports for teleconsultation • Support video call using platforms like zoom and skype to connect with hubs identified for teleconsultation

Source: NHSRC.2018. Operational Guidelines for Comprehensive Primary Health Care through Health and Wellness Centres.

Flow of Information

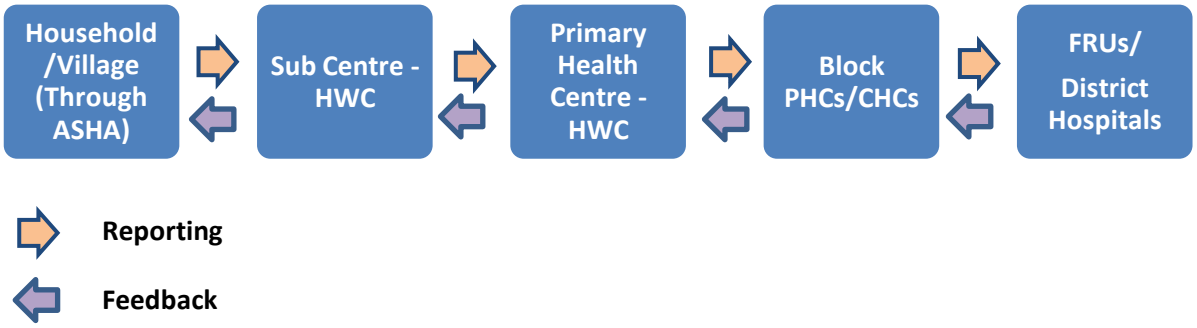


Figure 6 : Flow of Information

The flow of information from and to the HWC is shown in Figure 6. The community level information will flow into the system at the Sub Centre-HWC. The facility level data from the Sub Centre-HWC will be sent to the Primary Health Centre-HWC in the form of monthly reports. The aggregated facility data from the Block PHC and CHCs will flow to the District Hospitals and higher levels for data driven decision making.

Health and Wellness Centre model of care

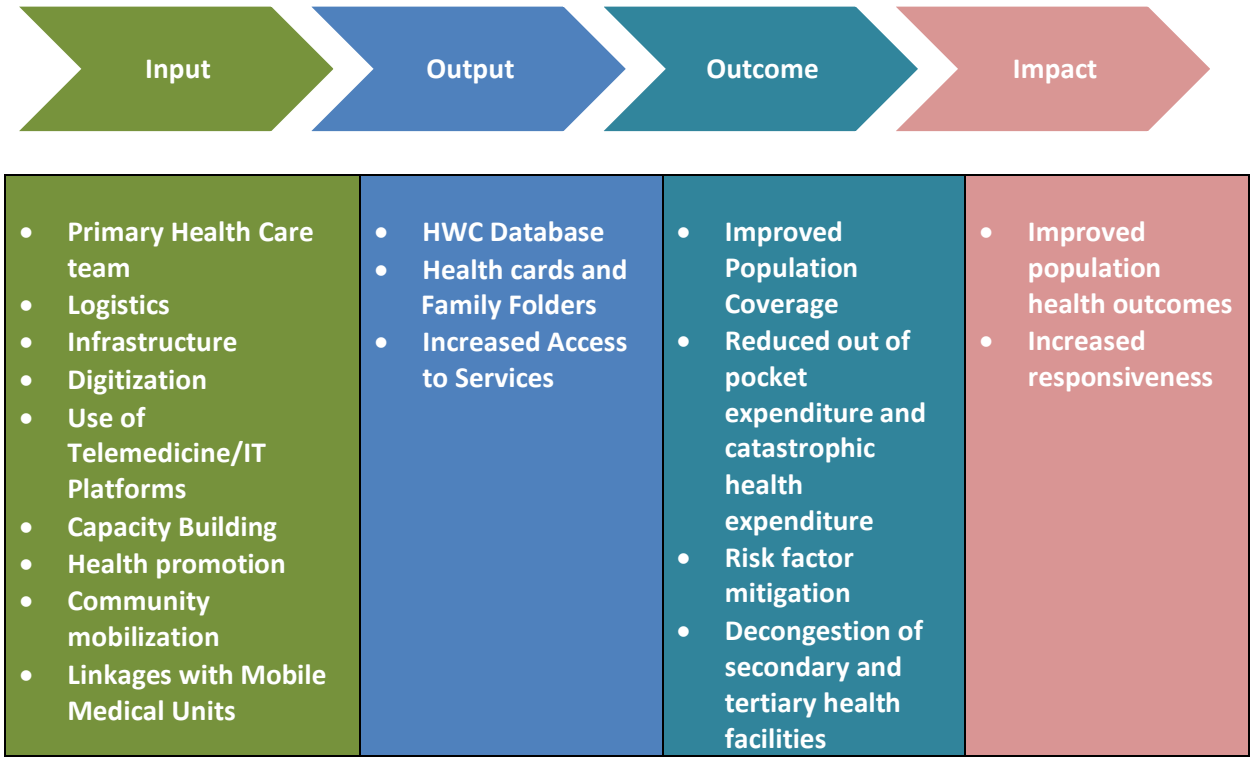


Figure 7: Health and Wellness Centre model of care

Source: NHSRC.2018. Operational Guidelines for Comprehensive Primary Health Care through Health and Wellness Centres.

Figure 7 illustrates Health and Wellness Centre model of care. The key inputs required are the primary health care team, adequate logistics and infrastructure to deliver the expanded range of services, provision of digital health tools for the health care team, appropriate training of healthcare staff, health promotion activities, community mobilization, suitable payment mechanism, teleconsultation and linkages with Mobile Medical Units (MMU) to reach the needy and poor in rural areas.

The essential outputs are the creation and maintenance of HWC database of all the individuals and their family members, Individual and family health cards, family health folders and improved access to all the 12 CPHC Services.

The outcomes are improved population coverage as HWC database will help identify left out population, reduced out of pocket expenditure and catastrophic health expenditure as the entire expanded range of services will be delivered closer to the community, risk factor mitigation through health promotion activities and decongestion of secondary and tertiary health care facilities.

The long terms impacts are improved population health outcomes and increased responsiveness of the society in relation to health care, which in turn will help address social and environmental determinants of care.

Areas of Opportunities

Expansion of Primary Health Care to CPHC

Currently, the Sub Centres and Primary Health Centres meet only 20% of health care needs and provide services limited to reproductive, maternal, new-born, child health and adolescent health (RMNCH+A) and some communicable disease management. These Sub Centres and Primary Health Centres will be upgraded to HWCs to provide expanded range of services. In addition to RMNCH+A and communicable disease management, there will also be services related to Non-communicable diseases (NCDs), ophthalmic ailments, ENT Care, oral health, elderly care, mental health and emergency care.

Upgradation of Infrastructure

Under the HWC initiative, the infrastructure at all levels of care: primary, secondary and tertiary will be upgraded. The Sub Centre-HWC and PHC-HWC infrastructure will be strengthened to deliver the expanded range of services, while the referral centres infrastructure will be strengthened to provide specialist care.

Employment Opportunities

With the expansion in health care services, HWCs will also provide a platform for numerous employment opportunities. One of the key additions to the workforce at the HWCs is the Mid-Level Health Provider. She/he will function as a Community Health Officer (CHO) who will lead the primary health care team at the SC-HWC.

Fostering Partnerships

Under the HWC initiative, states will enter into partnerships with different organisations for various purposes. These include, but are not limited to, building the infrastructure at the HWCs needed for the delivery of comprehensive primary health care services, for the recruitment and capacity building of health workforce, for providing expanded range of drugs and diagnostic equipment, for providing technology platform to be used at the HWCs etc.

Inter-Sectoral Convergence

The HWC Initiative is an opportunity for various sectors and programmes to converge. These include, but are not limited to, department of education for health promotion camps in schools, Integrated Child Development Services (ICDS), Integrated Child Protection Scheme (ICPS), Indira Gandhi Matritva Sahyog Yojana (IGMSY), SABLA, Rashtriya Bal Swasthya Karyakram, Rashtriya Kishore Swasthaya Karyakram, NPCDCS, ISHA, Shaala Siddhi, Mid- Day Meal programme, Department of rural development etc. As per National Health Policy 2017, coordinated action should be planned by all states on seven priority areas to improve the health environment. These are “Swachh Bharat Abhiyan, addressing tobacco, alcohol and substance abuse, Nirbhaya Nari (action against gender violence), balanced, healthy diets and regular exercises, Yatri Suraksha (preventing deaths due to rail and road traffic accidents), reduced stress and improved safety in the work place and reducing indoor and outdoor air pollution”(NHSRC 2018).

“States will need to develop strategies and institutional mechanisms in each of the seven areas, to create “Swasth Nagrik Abhiyan” – a social movement for health in the form of Jan Andolan.(NHSRC 2018)*”*

Improved Knowledge and Awareness

The HWC initiative is an excellent platform to improve the knowledge and awareness of the community about various health conditions, their risk factors, and prevention and treatment options. These include both the existing health conditions like pregnancy care, child immunization, treatment of infectious diseases etc. and emerging health conditions like cancer, diabetes, hypertension, mental ailments etc. Also, under this initiative, healthcare workers will acquire knowledge and training to provide care for various health related conditions including the aforementioned ones.

Research Opportunities

The HWC initiative provides opportunities to conduct, both primary and secondary research activities at all levels of care. The huge amount of data in the digitized format will provide an excellent platform to conduct secondary research. The research can be conducted on a wide array of domains- RMNCH+A, Communicable diseases, NCDs, mental health, oral care, ophthalmic and ENT care, elderly care, emergency care etc.

Monetary Gains

While on the one hand, the HWC initiative will help reduce the out-of-pocket expenditures especially for the rural beneficiaries, on the other, it provides monetary gains to the healthcare workers in the form of performance linked incentives.

Key Challenges

Undoubtedly, Health and Wellness Centres can play a crucial role in strengthening the primary health care system in India. But, numerous challenges remain. We believe that the highest priority for scaling up health services in the HWCs, especially in the rural areas would require much higher levels of public health spending which will help provide a basic strengthening of the staffing, an adequate supply of drugs and vaccines, and at least a minimal capacity of transport. This would also involve both the hard infrastructure of the health sector (physical plant, diagnostic equipment, telephone and Internet connectivity of these centers) and the soft infrastructure, implying better systems of management and supervision, and better accountability to the users through local oversight of these centers. We believe that without strong community involvement and trust in these centers, the expanded and effective coverage of the rural poor is unlikely to be achieved.

Of course, there would be several challenges related to the implementation process. For instance, the Government of India has announced establishment of 150,000 Health and Wellness Centres by the end of 2022. However, as of February 2019, only 10,252 HWCs had become operational across 35 States/UTs in the country[4] (Press Information Bureau ,Ministry of Health and Family Welfare 2019b), a long way to achieve the proposed target! List of 8030 operational HWCs as on 04, Feb, 2019 is available in the Appendix [5] (Press Information Bureau ,Ministry of Health and Family Welfare 2019a). Grossly inadequate health budgets[6], lack of the required human resources for health available to be

[4] http://pib.nic.in/PressReleaseIframePage.aspx?PRID=1565980
[5] http://pib.nic.in/newsite/PrintRelease.aspx?relid=188246.
[6] Government of India has budgeted Rs. 17,54,502/SHC-HWC, Rs. 9,88,000/Rural PHC-HWC and Rs. 15,39,850/ Urban PHC-HWC (NHSRC 2018). However, budget allocation in the year 2019-2020 for the HWC initiative increased merely by around Rs. 350 crores from the revised budget for the year 2018-19 (from Rs. 999.96 crore to Rs. 1,349.97 crores) for rural areas and increased by Rs. 50 crores for urban areas.

posted at the HWCs; lack of control and oversight etc. will make the process to convert more and more SCs and PHCs into HWCs difficult; Scarcity of human resources at the public health facilities especially in rural areas is a critical challenge. As per the Rural Health Statistics Report 2017, there is a shortfall of around 81.6% specialists in rural health facilities[7](Wal 2017). There is a shortfall of 84% Surgeons, 76.7% Gynaecologists, 83.2% Physicians and 80.2% Paediatrician in the community health centres (CHCs) in India.(Bakshi, Sharma, and Kumar 2018). In the Primary Health Centres (PHCs), there is a shortfall of 65.8% Medical Officers(MOs), 35.7% laboratory technician, 18.7% pharmacist (Bakshi, Sharma, and Kumar 2018).

The current workforce will undoubtedly be quite insufficient to deliver the expanded range of services at the HWCs. Recruitment of the required number of health workers will be significant challenge. Next, there are challenges related to infrastructure. Transforming a Sub centre to a Health and Wellness Centre will be more challenging compared to transforming a Primary Health Centre to a HWC. Further, as per Rural Health Statistics Report 2017, the existing numbers of rural health facilities are not sufficient to meet the population norms. There is a shortfall of 19% Sub Centres, 22% Primary Health Centres and 30% Community Health Centres (Wal 2017). This calls for building new facilities to function as HWC instead of just upgrading the existing Sub-Centres and Primary Health Centres as HWCs.

There will be challenges related to development and implementation of the IT system. Creating Unique Health IDs and linking them with the existing health programmes to create a longitudinal health record of each individual is a challenging task. Training Health workers to use IT systems for the newly incorporated health care services – NCDs, mental health, oral health etc. is another challenge. Last, but not least, pathways for follow-up treatment after primary care is delivered at the HWCs does not seem to be clear. How will a woman screened positive for cervical cancer at the HWC get appropriate quality treatment and further rehabilitation? How will an elderly visiting the HWC be linked to the day care operational in the area? How will cases of mental illness identified at the HWC be provided with follow up care? The health care services envisaged to be delivered at the HWCs are currently not even delivered at the Community Health Centres in India. Hence, it is very crucial to set up a referral link to deliver the appropriate follow up care for the needy patients beyond the HWCs.

Conclusion:

While we believe that the newly designed HWCs initiative has several novel features that have the potential to vastly benefit the rural populations, at the same time it is critical to keep in mind the following broad issues if the HWCs have to succeed on scale: 1) a much higher level of public health spending in general and much higher outlays for HWCs in particular; 2) proper recruitment, comprehensive training, effective control and oversight and timely and adequate payments for the various health functionaries; 3) an effective and efficient management structure for the HWCs; and 4) commensurate physical infrastructure and human resources in the sub-centers and the Primary Health Centers converted into the HWCs with the growing needs of the regions.

[7] https://data.gov.in/catalog/rural-health-statistics 2017?filters%5Bfield_catalog_reference%5D=4215201&format=json&offset=0&limit=6&sort%5Bcreated%5D=desc

References

Bakshi, Harsh, Rashmi Sharma, and Pradeep Kumar. 2018. “Ayushman Bharat Initiative (2018): What We Stand to Gain or Lose!” 43 (2): 63–66.

Lahariya, Chandrakant. 2018. “Ayushman Bharat Program and Universal Health Coverage in India.” *Indian Pediatr* 55: 495–506.

Ministry of Health & Family Welfare, Government of India. 2018. “Pradhan Mantri Rashtriya Swasthya Suraksha Mission:Additional Data Collection Drive for Urban Wards.” https://www.pmjay.gov.in/sites/default/files/2018-07/Presentation_Urban_ADCD_Rev1.pdf.

National Health Systems Resource Centre. 2017. “National Health Accounts Estimates for India (2014-15).” New Delhi: Ministry of Health & Family Welfare, Government of India.

NHSRC. 2018. “Operational Guidelines for Comprehensive Primary Health Care through Health and Wellness Centres.” http://nhsrcindia.org/sites/default/files/Operational%20Guidelines%20For%20Comprehensive%20Primary%20Health%20Care%20through%20Health%20and%20Wellness%20Centres.pdf.

NITI Aayog. 2018. “National Health Stack -Strategy and Approach.” http://niti.gov.in/writereaddata/files/document_publication/NHS-Strategy-and-Approach-Document-for-consultation.pdf.

Press Information Bureau ,Ministry of Health and Family Welfare. 2019a. “Health and Wellness Centres under Ayushman Bharat.” *Press Information Bureau, Government of India*, 2019. http://pib.nic.in/newsite/PrintRelease.aspx?relid=188246.

———. 2019b. “More than 10,000 Ayushman Bharat-Health and Wellness Centres Become Operational.” *Press Information Bureau, Government of India*, February 22, 2019. http://pib.nic.in/PressReleaseIframePage.aspx?PRID=1565980.

Sinha, Deepa. 2019. “On Health and Nutrition, Budget 2019 Is Lacklustre and Uninspiring.” *The Wire*, 2019. https://thewire.in/health/on-health-and-nutrition-budget-2019-is-lacklustre-and-uninspiring.

Vivek, V. 2017. “Indians Sixth Biggest Private Spenders on Health Among Low-Middle Income Nations.” *India Spend*, 2017. https://archive.indiaspend.com/cover-story/indians-sixth-biggest-private-spenders-on-health-among-low-middle-income-nations-78476.

Wal, Aradhna. 2017. “Borders Without Doctors: Report Shows Rural Healthcare Still Not Up to Code.” *News18*, 2017. https://www.news18.com/news/india/borders-without-doctors-indias-rural-healthcare-still-not-up-to-code-1615393.html.

Annexures

Annexure 1: Eleven categories under which urban households selected for PMRSSM

Eleven categories under which urban households selected for PMRSSM		
S.No.	Work Category	Households
1.	Rag picker	23,825
2.	Beggar	47,371
3.	Domestic Worker	6,85,352
4.	Street Vendor/Cobbler/Hawker/Other service provider working on streets	8,64,659
5.	Construction Worker/Plumber/Mason/labor/painter/welder/security guard/collie and other head-load worker	1,02,35,435
6.	Sweeper/sanitation worker/mali	6,06,446
7.	Home based worker/Artisan/handicrafts worker/tailor	27,58,194
8.	Transport worker/Driver/conductor/helper to drivers and conductors/cart puller/Rikshaw puller	27,73,310
9.	Shop worker/Assistant/peon in small establishment/Helper/Delivery Assistant/Attendant/Waiter	36,93,042
10.	Electrician/Mechanic/Assembler/repair worker	11,99,262
11.	Washerman/Chowkidar	4,60,433

Source: Ministry of Health & Family Welfare, Government of India. 2018. "Pradhan Mantri Rashtriya Swasthya Suraksha Mission: Additional Data Collection Drive for Urban Wards." https://www.pmjay.gov.in/sites/default/files/2018-07/Presentation_Urban_ADCD_Rev1.pdf.

Annexure 2: Key Principles underlying Health and Wellness Centres

Key Principles underlying Health and Wellness Centres	
1	Transform existing Sub Health Centres and Primary Health Centres to HWCs to ensure universal access to an expanded range of comprehensive primary health care services
2	Ensure a people centered, holistic, equity sensitive response to people's health needs through a process of population empanelment, regular home and community interactions and people's participation
3	Enable delivery of high quality care that spans health risks and disease conditions through a commensurate expansion in availability of medicines & diagnostics, use of standard treatment and referral protocols and advanced technologies including IT systems
4	Instil the culture of a team-based approach to delivery of quality health care encompassing: preventive, promotive, curative, rehabilitative and palliative care
5	Ensure continuity of care with a two way referral system and follow up support
6	Emphasize health promotion (including through school education and individual centric awareness) and promote public health action through active engagement and capacity building of community platforms and individual volunteers
7	Implement appropriate mechanisms for flexible financing, including performance-based incentives and responsive resource allocations
8	Enable the integration of Yoga and AYUSH as appropriate to people's needs
9	Facilitate the use of appropriate technology for improving access to health care advice and treatment initiation, enable reporting and recording, eventually progressing to electronic records for individuals and families

10	Institutionalize participation of civil society for social accountability
11	Partner with not for profit agencies and private sector for gap filling in a range of primary health care functions
12	Facilitate systematic learning and sharing to enable feedback, and improvements and identify innovations for scale up
13	Develop strong measurement systems to build accountability for improved performance on measures that matter to people

Source: NHSRC.2018. Operational Guidelines for Comprehensive Primary Health Care through Health and Wellness Centres.

Annexure 3: List of Services to be provided at Health and Wellness Centres as per operational guidelines, Health and Wellness Centres for Comprehensive Primary Health Care

List of Services to be provided at Health and Wellness Centres as per operational guidelines, Health and Wellness Centres for Comprehensive Primary Health Care		
S.No.....	Health Service	Care at the Health and Wellness Centre
1.	Care in Pregnancy - Maternal Health and Child birth	● Early registration of pregnancy and issuing of ID number and Mother and Child protection card. ● Antenatal check-up including screening of Hypertension, Diabetes, Anaemia, Immunization for pregnant woman-TT, IFA and Calcium supplementation ● Identifying high risk pregnancies, child births and post-partum cases and referral to higher facilities ● Screening, referral and follow up care in cases of Gestational Diabetes, and Syphilis during pregnancy ● Normal vaginal delivery in specified delivery sites as per state context - where Mid-level provider or ANM is trained as Skill Birth Attendant (Type B SHC) ● Provide first aid treatment and referral for obstetric emergencies, e.g. eclampsia, PPH, Sepsis, and prompt referral (Type B SHC)
2.	Neonatal and Infant Health	● Identification and management of high risk new-born - low birth weight/preterm/ sick new-born and sepsis (with referral as required), ● Management of birth asphyxia (Type B SHC)

		● Identification, appropriate referral and follow up of congenital anomalies ● Management of ARI/Diarrhoea and other common illness and referral of severe cases. ● Screening, referral and follow up for disabilities and developmental delays ● Complete immunization ● Vitamin A supplementation ● Identification and follow up, referral and reporting of Adverse Events Following Immunization (AEFI).
3.	Childhood and Adolescent health care services including immunization	● Complete immunization ● Detection and treatment of Anaemia and other deficiencies in children and adolescents. ● Identification and management of vaccine preventable diseases in children such as Diphtheria, Pertussis and Measles. ● Early detection of growth abnormalities, delays in development and disability and referral ● Prompt Management of ARI, acute diarrhoea and fever with referral as needed ● Management (with timely referral as needed) of ear, eye and throat problems, skin infections, worm infestations, febrile seizure, poisoning, injuries/accidents, insect and animal bites ● Detection of SAM, referral and follow up care for SAM. ● Adolescent health- counselling ● Detection for cases of substance abuse, referral and follow up ● Detection and Treatment of Anaemia and other deficiencies in adolescents ● Detection and referral for growth abnormality and disabilities, with referral as required
4.	Family planning, contraceptive services and	● Insertion of IUCD ● Removal of IUCD

	other reproductive care services	● Provision of condoms, oral contraceptive pills and emergency contraceptive pills ● Counselling and facilitation for safe abortion services ● Medical methods of abortion (up to 7 weeks of pregnancy) on fix days at the HWC by PHC MO ● Post abortion contraceptive counselling ● Follow up for any complication after abortion and appropriate referral if needed ● First aid for GBV related injuries - link to referral centre and legal support centre ● Identification and management of RTIs/STIs ● Identification, management (with referral as needed) in cases of dysmenorrhoea, vaginal discharge, mastitis, breast lump, pelvic pain, pelvic organ prolapse.
5.	Management of Communicable diseases: National Health Programmes (Tuberculosis, Leprosy, Hepatitis , HIV- AIDS, Malaria, Kalaazar, Filariasis and Other vector borne diseases)	● Diagnosis, (or sample collection) treatment (as appropriate for that level of care) and follow up care for vector borne diseases – Malaria, Dengue, Chikungunya, Filaria, Kalazar, Japanese Encephalitis, TB and Leprosy. ● Provision of DOTS for TB and MDT for leprosy ● HIV Screening (in Type B SHC), appropriate referral and support for HIV treatment. ● Referral of complicated cases
6.	Management of Communicable diseases and General Outpatient care for acute simple illness and minor ailments	● Identification and management of common fevers, ARIs, diarrhoea, and skin infections. (scabies and abscess) ● Identification and management (with referral as needed) in cases of cholera, dysentery, typhoid, hepatitis, rabies and helminthiasis. ● Management of common aches, joint pains, and common skin conditions, (rash/urticaria)

7.	Prevention, Screening and Management of Non-Communicable diseases	● Screening and treatment compliance for Hypertension and Diabetes, with referral if needed. ● Screening and follow up care for occupational diseases (Pneumoconiosis, dermatitis, lead poisoning); fluorosis; respiratory disorders (COPD and asthma) and epilepsy ● Cancer – screening for oral, breast and cervical cancer and referral for suspected cases of other cancers. ● Confirmation and referral for Deaddiction – tobacco/alcohol/ substance abuse ● Treatment compliance and follow up for all diagnosed cases. ● Linking with specialists and undertaking two way referral for complications
8.	Screening and Basic management of Mental health ailments	● Detection and referral of patients with severe mental disorders ● Confirmation and referral to deaddiction centres ● Dispense follow up medication as prescribed by the Medical officer at PHC/ CHC or by the Psychiatrist at DH ● Counselling and follow up of patients with Severe Mental Disorders ● Management of Violence related concerns
9.	Basic oral health care	● Screening for gingivitis, periodontitis, malocclusion, dental caries, dental fluorosis and oral cancers, with referral ● Oral health education about dental caries, periodontal diseases, malocclusion and oral cancers ● Management of conditions like apthous ulcers, candidiasis and glossitis, with referral for underlying disease ● Symptomatic care for tooth ache and first aid for tooth trauma, with referral ● Counselling for tobacco cessation and referral to Tobacco Cessation Centres

10.	Care for Common Ophthalmic and ENT problems	● Diagnosis of Screening for blindness and refractive errors ● Identification and treatment of common eye problems – conjunctivitis, acute red eye, trachoma; spring catarrh, xeropthalmia as per the STG ● Screening for visual acuity, cataract and for refractive errors, ● Management of common colds, ASOM, injuries, pharyngitis, laryngitis, rhinitis, URI, sinusitis, epistaxis. ● Early detection of hearing impairment and deafness with referral. ● Diagnosis and treatment services for common diseases like otomycosis, otitis externa, ear discharge etc. ● Manage common throat complaints (tonsillitis, pharyngitis, laryngitis, sinusitis) ● First aid for injuries/ stabilization and then referral. ● Removal of Foreign Body. (Eye, Ear, Nose and throat). ● Identification and referral of thyroid swelling, discharging ear, blocked nose, hoarseness and dysphagia
11.	Elderly and palliative health care services	● Arrange for suitable supportive devices from higher centres to the elderly /disabled persons to make them ambulatory. ● Referral for diseases needing further investigation and treatment, to PHC/CHC/DH. ● Management of common geriatric ailments; counselling, supportive treatment ● Pain Management and provision of palliative care with support of ASHA
12.	Emergency Medical Services, including for Trauma and Burns	● Stabilization care and first aid before referral in cases of - poisoning, trauma, minor injury, burns, respiratory arrest and cardiac arrest, fractures, shock , chocking, fits, drowning, animal bites and haemorrhage, infections

		(abscess and cellulitis), acute gastro intestinal conditions and acute genito urinary condition. ● Identify and refer cases for surgical correction - lumps and bumps (cysts/ lipoma/haemangioma/ganglion); anorectal problems, haemorrhoids, rectal prolapse, hernia, hydrocele, varicoele, epidymo-orchitis, lymphedema, varicose veins ,genital ulcers, bed ulcers, lower urinary tract symptoms (Phimosis, paraphimosis), and atrophic vaginitis.

Source: NHSRC.2018. Operational Guidelines for Comprehensive Primary Health Care through Health and Wellness Centres.

Annexure 4: Key requirements of the IT System at the HWC

Key requirements of the IT System at the HWC	
1	Adherence to applicable standards laid down under Metadata and Data Standards for Health (MDDS) and EHR standard developed by MoHFW
2	Ensure security and data privacy by providing secured role-based access system coupled with end-to end encryption. The system should adhere to the data privacy and security standards as per HER standards. In addition, a detailed logging system with essential audit trails (for critical read/write/modify/delete operations) and error reporting (android/mobile app notifications and emails) should be made operational
3	Configurability i.e., developed as a platform on which the various programs, state specific variations, family/individual profile can be created - using metadata, configuration, pluggable user interface templates and rules. This would support- a) Addition of new programmes, b) Change in program definition over time and c) customization according to the local context and for various programs
4	High level of interoperability to integrate with state level MIS, RCH portal and other programme systems functional at national and state level. The integration architecture should be compatible with the recommended approaches in the MDDS for Health document and EHR standards
5	Ability to manage large data volumes i.e. approximately 6,000 active individual health service records as part of about 1000 active family health records at Health Sub Centre level. System would be horizontally scalable by addition of servers as to manage the high user load / data volume such that performance of the system is not compromised
6	Ability to function on offline mode – (even when Internet is unavailable for long period) and allow for auto or manual synchronization of data without any data loss when connection is available
7	Application should be upgradeable via single click or auto-upgradeable by the end user

Source: NHSRC.2018. Operational Guidelines for Comprehensive Primary Health Care through Health and Wellness Centres.

Annexure 5: List of Operationalized HWCs as on 04.02.2019

List of Operationalized HWCs as on 04.02.2019	
State/UT	**Operationalized HWCs as on 04.02.2019**
Andaman and Nicobar Islands	30
Andhra Pradesh	1361
Arunachal Pradesh	54
Assam	301
Bihar	211
Chandigarh	10
Chhattisgarh	109
Dadra & Nagar Haveli	27
Daman & Diu	24
Goa	14
Gujarat	347
Haryana	133
Himachal Pradesh	02
Jammu & Kashmir	36
Jharkhand	333
Karnataka	548
Kerala	350
Madhya Pradesh	97
Maharashtra	248
Manipur	29
Meghalaya	01
Mizoram	01
Nagaland	05
Odisha	486
Puducherry	02
Punjab	373
Rajasthan	451
Sikkim	05
Tamil Nadu	1318
Telangana	445
Tripura	71
Uttar Pradesh	467
Uttarakhand	51
West Bengal	0
	8030

Ref: Press Information Bureau, Ministry of Health and Family Welfare. 2019. "Health and Wellness Centres under Ayushman Bharat." *Press Information Bureau, Government of India*, 2019. http://pib.nic.in/newsite/PrintRelease.aspx?relid=188246.