RMNCAH-N Services During COVID-19: A spotlight on India's policy responses to maintain and adapt essential health services

PATH

Key messages

- Like most countries, India has experienced disruptions to reproductive, maternal, newborn, child, and adolescent health and nutrition (RMNCAH-N) services during COVID-19. Reasons for decreased service utilization point to barriers such as initial movement restrictions and decreased demand due to fear of COVID-19. In response to disruptions caused by early lockdowns, India has moved to a subnationally driven and localized containment approach that replaces earlier widespread lockdowns with micro-pockets of restrictions determined by states.
- Reflecting the robust policy environment, India's Ministry of Health and Family Welfare released and has continually updated policies and guidelines aimed at maintaining essential health services. Given the decentralized nature of India's health system though, it is unclear the extent to which states have adopted and implemented policies.
- These policies include a range of service delivery adaptations, most of which are geared at continuity of services within containment zones; services are generally recommended to continue as normal outside of containment zones. Within containment zones, many of these interventions are evidence-based in non-COVID-19 contexts—such as home delivery of commodities or telemedicine—and are promising for enhancing primary health care. However, further evidence is needed on the feasibility and effectiveness of these interventions during COVID-19.

India's first recorded COVID-19 case was on January 30, 2020, in Kerala. Since then, cases have increased, with new daily cases peaking in mid-September, and as of January 2021 India had about 10.5 million cases total, or 777 cases per 100,000 people. Five states bear the brunt of cases: Maharashtra, Andhra Pradesh, Karnataka, Tamil Nadu, and Kerala,[1] all states with large internationally connected urban centers. In response to the pandemic, the national government acted rapidly to develop and deploy policies to mitigate the effects of COVID-19. This brief summarizes key policies pertaining to the delivery of health services, but the robust policy infrastructure in India has contributed to the development of a notably vast number of policies and orders, many which are not detailed here.

Initially, the national government quickly instituted a full lockdown across the entire country on March 24, 2020. This action is credited with slowing the spread of coronavirus, though the order necessitated subsequent clarifications to ensure movement and availability of goods and services, including essential health services (EHS). A supplementary order was issued on April 10, 2020, that exempted EHS delivery from the lockdown order. Recognizing India's large population size and diversity, beginning on April 15, the country began instituting a formal "zonal" approach at the state and district levels, which indicated the

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stringency of movement restrictions, based on the number of COVID-19 cases. All districts were classified as red, green, or orange per the following criteria:

- Red zones: Cases doubling at a rate of less than four days or if the district contributed to 80 percent of cases for the state.
- Orange zones: Areas that were neither red nor green zones (for example, red zones on their way to being green zones).
- Green zones: No confirmed cases or had no cases in the past 21 days.

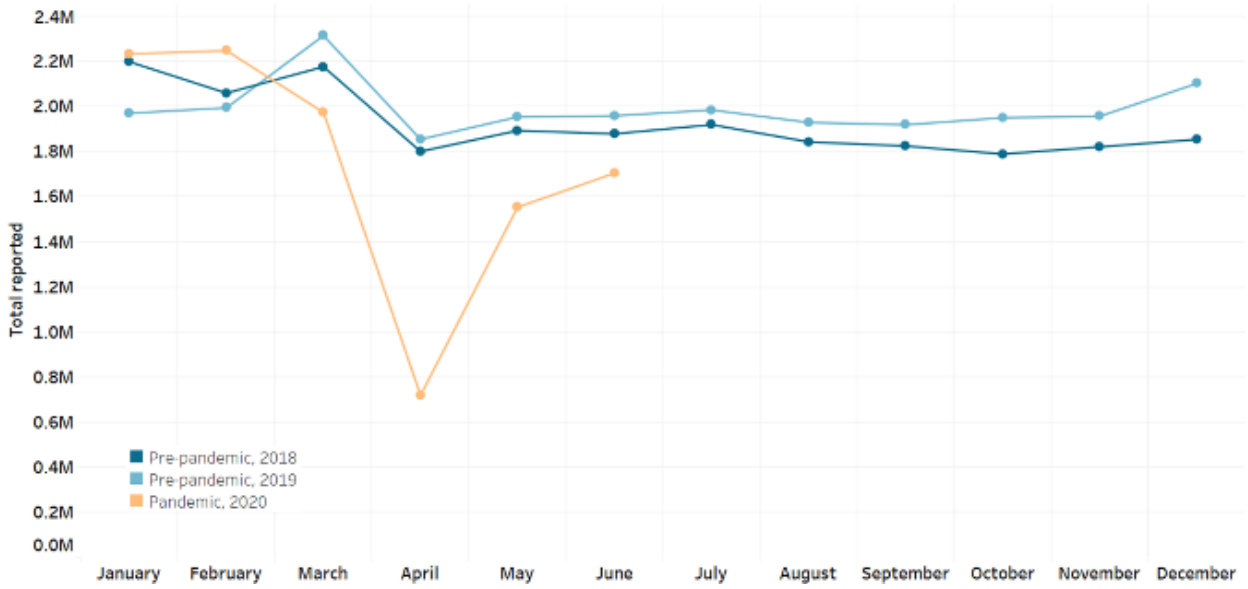
Around May 1, "containment zones" were introduced to replace the nationally driven zonal approach and demarcate smaller micro-pockets of restrictions. Phase unlocks began to roll back the national, color-coded zonal restrictions, and widescale lockdowns were generally revoked by August 2020. Instead, demarcation of containment zones were done subnationally at the discretion of district administrations, municipal corporations, or panchayat bodies; the most recent guidance on containment zones gives full authority to states to determine containment zones and oversee adherence to containment measures.[2] The rules for classification and time periods vary. For example, Delhi declares a containment zone if more than three infections are detected, while in Noida, containment zones are declared if even one person is positive within a 250-meter area. Some areas declassify containment after a period of 28 days, and others after 7.[3] In containment zones, residents are not supposed to leave their homes even for essential activities, but this targeted approach allowed states to implement restrictions in a localized way, while mitigating the externalities of wide-scale lockdowns. Typically, most activities are permitted to continue as normal outside of containment zones.

Once the initial lockdowns had eased, this unique zonal approach to the pandemic affected delivery, adaptation, and utilization of reproductive, maternal, newborn, child, and adolescent health and nutrition (RMNCAH-N) services, based on whether beneficiaries were located inside or outside the containment zones.

RMNCAH-N service disruptions during the COVID-19 pandemic

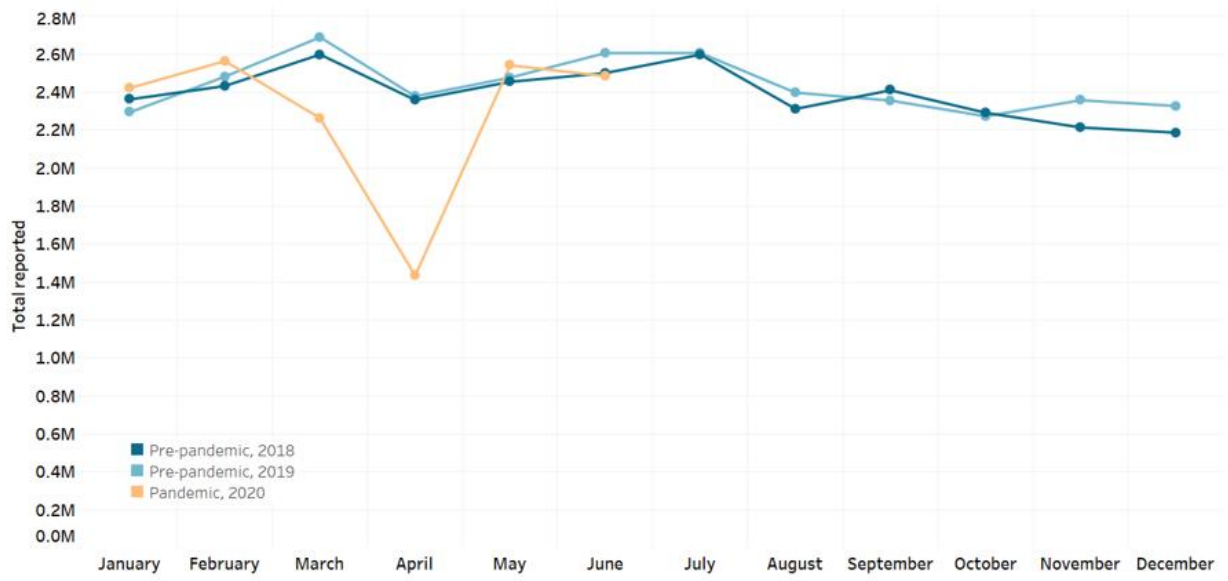
India experienced disruptions to routine health services during the pandemic, particularly early on when its lockdown was at its strictest. Data from the National Health Mission Health Management Information System (HMIS) indicates that both communicable and noncommunicable diseases saw a reduction in patient attendance. Maternal health services saw a large decrease, with fewer antenatal care (ANC) visits in April 2020 than the prior year; visits began to recover in May 2020 when lockdown measures were relaxed slightly (Figure 1). In immunization, 1 million fewer children received the third dose of the pentavalent vaccine in April 2020 compared with a year prior (Figure 2); similarly, vaccination began to recover as lockdowns eased.[4] Global Financing Facility modeling indicates that the pandemic has the potential to leave 40 million women without access to family planning services.[5]

Figure 1. Descriptive trends in the number of Pentavalent 3 doses administered in India; January 2018 to June 2020 (all facilities).



Source: Created using publicly available Ministry of Health and Family Welfare Health Management Information System Standard Reports accessed at https://nrhm-mis.nic.in/hmisreports/frmstandard_reports.aspx.

Figure 2. Descriptive trends in the number of pregnant women registered for ANC in India; January 2018 to June 2020 (all facilities).



Source: Created using publicly available Ministry of Health and Family Welfare Health Management Information System Standard Reports accessed at https://nrhm-mis.nic.in/hmisreports/frmstandard_reports.aspx.

Reasons for RMNCAH-N services disruptions during the COVID-19 pandemic

As a decentralized health system, India's states are largely responsible for the COVID-19 response; however, several national-level actions impacted RMNCAH-N services. India's aggressive approach of lockdown to limit the spread of COVID-19 led to disruptions of both the supply and demand of RMNCAH-N services, particularly at the beginning of the pandemic. For example, confusion around which facilities were still providing essential services, movement restrictions, and lack of transportation options affected access to RMNCAH-N services.[6] Group gatherings were prohibited, which led to routine immunizations being canceled, and outreach services, including Village Health and Nutrition Days (VHND), were halted.[5–7]

In addition, the national and state governments significantly shifted the health care system to address COVID-19, including reallocating selected providers (at all levels) and public health care facilities to only administer COVID-19 care. According to a confidential Global Financing Facility report shared with our team on November 18, 2020, by the Bill & Melinda Gates Foundation and P. Salve,[7] these diversions of health workers at all levels of the health system, including accredited social health activists (ASHAs), Anganwadi workers (AWWs), auxiliary nurse midwives (ANMs), and other community-level workers, diminished the availability of routine services initially.[a] COVID-19 mitigation measures also disrupted medical supply chains. Lockdowns limited interstate transport, and essential medicine lists that ensure supply chain continuity were also slow to be updated.[b]

Care-seeking behavior has also contributed to declines in service utilization, with a fear of contracting the virus deterring people from seeking EHS. Many people did not want to visit facilities or be transported by ambulance for fear of coronavirus infection. Frontline health workers did not want to accompany women to facilities, and community members did not want health care workers in their homes. In addition, loss of income due to lockdowns precluded much of the population from health care access, especially from the private sector, which began raising fees for essential services.

India's RMNCAH-N policies during the COVID-19 pandemic

In addition to its overall response to the pandemic, India quickly enacted new policies to support the health system in delivering RMNCAH-N services during COVID-19. We reviewed policies that were available on the national Ministry of Health and Family Welfare (MOHFW) and national government agency websites or were publicly provided by governments through another mechanism. The policies are adapted from global guidance along with existing Indian policies and guidelines and adapted to fit India's zonal approach to the pandemic. We reviewed nine policies that were published in English between March to November 2020 and took the form of national strategies (n = 1), guidelines (n = 5),[c] laws (n = 1), and operational guidances (n = 2). It is worth noting that these nine policies are those that relate directly to RMNCAH-N services, but they often made reference to other secondary policy documents; where additional reference policies were mentioned, these were also reviewed. The following brief reports an analysis of the policy content, with the following aims:

a. Odisha State is an exception as it did not suspend outreach services.
b. This requirement was lifted on April 27, allowing COVID-19 patients with mild symptoms to self-isolate at home, and provided relief for the health system.
c. Systematically developed evidence-based statements that assist providers, recipients, and other stakeholders to make informed decisions about appropriate health interventions. Health interventions are defined broadly to include not only clinical procedures but also public health actions.

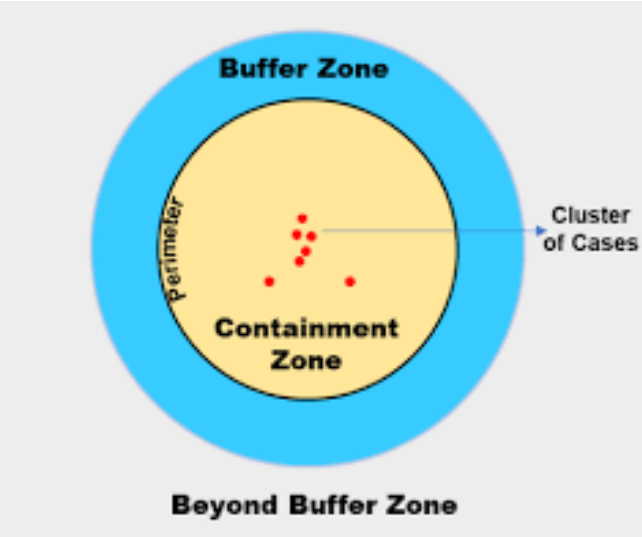
- Describe the approach to maintaining reproductive, maternal, newborn, and child health (RMNCAH-N) services that India has taken during the COVID-19 pandemic and note how it aligns with global guidance.
- Identify innovative adaptations used to maintain essential health services that could be replicated elsewhere or used to accelerate primary health care progress beyond the pandemic.

The policies we reviewed recognize the importance of continuing essential services for RMNCAH-N and dictate that essential services should not be denied for any reason, including COVID-19 infection. Overall, India's guidance aligns with the global guidance that the World Health Organization has issued on maintaining EHS during the COVID-19 pandemic. There are several critical limitations to this analysis that must be noted. Firstly, India's policy infrastructure and civil service is very robust, leading to the development and deployment of a vast number of policies; this brief captures only a small fraction of the policies available. Similarly, policies have been deployed by a multitude of ministries, and while we focus on reviewing health policies, policies deployed by other bureaus within the government may have implications for health service delivery (for instance, limitations on movement). Professional associations of medical workers and civil societies have also released policy guidance, which is not reviewed here. Lastly, it is critical to note that while national policies outline guidance on service delivery, states are still largely responsible for adopting and operationalizing this guidance, and state decisions on where and how to operationalize national policies may vary.

Maintenance of RMNCAH-N services

In April, once ministry orders clarified that essential health services were required to continue, RMNCAH-N services were expected to be available in all facilities with appropriate social distancing, protective equipment, and hand and respiratory hygiene. As introduced above, districts were classified into red, green, and orange zones early in the pandemic, with varying degrees of movement restrictions. As this zonal approach was relaxed, containment zones were instead defined, with geographic areas classified as either (a) a containment/buffer zone with active COVID-19 cases or (b) outside it without active cases. Building on India's zonal approach to containing the pandemic, there were modifications to health service delivery recommended in containment/buffer zones with active COVID-19 outbreaks. Generally, speaking, outside these containment zones, health services are recommended to continue as usual. Containment/buffer zones with reducing case counts can start regular RMNCAH-N activities after a period of 14 days of delisting as a containment/buffer zone. Reassignment of containment zones is dynamic and done on a weekly basis, so the exact coverage of containment zones is not known.

Figure 3. Depiction of India's containment, buffer, and beyond buffer zones.



Source: India National Centre for Disease Control. Roles and Responsibilities of RRT's in COVID-19 response. https://ncdc.gov.in/WriteReadData/l892s/41768812571585916287.pdf.

Below is a table outlining what India's policies advise for each RMNCAH-N sub-theme area, depending on whether it is delivered within a containment zone or not.

Table 1. Summary of RMNCAH-N services during COVID-19.

Health area	Program activity	Recommendation and service status within containment/buffer zone	Recommendation and service status outside of containment/buffer zone
All services		*Adaptation of services:* Teleconsultation should be promoted in all health facilities. Essential commodities like calcium, zinc, ORS, contraceptives, and other necessary medicines should be available via home delivery.	
Maternal and newborn care	Antenatal care	*Adaptation of services:* ANC clinic services should be limited to walk-ins. House-to-house visits should be made by health workers/COVID warriors to inquire about any pregnant woman's needs and link her to required services. High-risk pregnancies should be referred to a health facility outside of the buffer and containment zone. *Suspension of services:* PMSMA[d] and VHSND/UHSND[e] should be halted.	*Maintenance of services with IPC:* ANC services should continue as usual. PMSMA should continue as planned. VHSND/UHSND should be modified to avoid overcrowding and maintain social distancing, with 5–10 beneficiaries allocated per hour. Alternate session sites may be used in case of space constraints, or division of session into 2 sessions.

d. Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA) guarantees comprehensive and quality antenatal care, free of cost, universally to all pregnant women in their second and third trimesters on the ninth of every month in designated government health facilities.
e. Village Health, Sanitation, and Nutrition Days and Urban Health, Sanitation, and Nutrition Days, which are a platform to provide coordinated services for children in the areas of health, nutrition, early childhood development, and sanitation.

Health area	Program activity	Recommendation and service status within containment/buffer zone	Recommendation and service status outside of containment/buffer zone
	Labor and delivery	*Maintenance of services with IPC:* All health facilities should continue to provide delivery services. Every pregnant woman should be linked with an appropriate nearby health facility for delivery, and ambulance services booked in advance for timely transport.	
	Postnatal care	*Adaptation of services:* House-to-house visits should be made by health workers/COVID warriors to inquire about any postnatal care needs and link them to required services. ASHA visits should be discontinued.	*Maintenance of services with IPC:* All PNC services should continue at all facilities. House visits by ASHAs should continue.
	Newborn care	*Maintenance of services with IPC:* Newborn screenings under the RBSK[f] program should be done at all health facilities where deliveries have taken place. Sick newborns should be treated in the nearest SNCU/NBSU. Proper referrals should continue. *Adaptation of services:* Routine SNCU follow-up should be conducted through teleconsultation; however, sick newborns showing danger signs should be referred to nearest SNCU with proper referral arrangement. House-to-house visits should be made by health workers/COVID warriors to inquire about any postnatal care needs and link them to required services. *Suspension of services:* Family participatory care in SNCU should be suspended.	*Maintenance of services with IPC:* All services should continue as usual, including home-based newborn and young child care.
Child health	Well child care	*Maintenance of services with IPC:* "MNCH week" to continue but only for hard-to-reach populations. RBSK District Early Intervention Center (DEIC) services should be provided on demand to walk-in beneficiaries in facility. Treatment of children with 4Ds under the RBSK program should continue in all designated hospitals. *Adaptation of services:* House-to-house visits should be made by health	*Maintenance of services with IPC*: All other services continued. RBSK DEIC should continue for management of the 4Ds.

f. Rashtriya Bal Swasthya Karyakram (RBSK) is an early child health screening initiative geared at early detection of 30 childhood health conditions and providing linkages to care, support, and treatment.

Health area	Program activity	Recommendation and service status within containment/buffer zone	Recommendation and service status outside of containment/buffer zone
		workers/COVID warriors to inquire about any HBNC/HBYC care needs and link them to required services.	
	Sick child care	*Maintenance of services with IPC:* PHC policy encouraged continuation of community-based management of acute malnutrition in children, with clinics remaining open and community outreach continuing.	*Maintenance of services with IPC*: All other services continued.
Immunization	Routine immunization	*Maintenance of services with IPC:* Immunization services should be provided on demand to walk-ins, but with no outreach sessions or active mobilization. Birth doses should be provided as usual (since they are already given in the facility).	*Maintenance of services with IPC:* Both facility-based and outreach sessions can be conducted with modified VHSND/UHSND. Birth doses should be provided as usual (since they are already given in the facility).
Nutrition		*Maintenance of services with IPC:* Services to children with SAM should be provided in the nearest nutrition rehabilitation center. Proper referral arrangement should be ensured. *Adaptation of services:* Routine follow-up should be provided through teleconsultations. House-to-house visits should be made by health workers/COVID warriors to inquire about any SAM/nutrition rehabilitation care needs and link them to required services.	*Maintenance of services with IPC:* Services to children with SAM should continue as usual.
Adolescent health		*Maintenance of services with IPC:* In-person services should be limited to walk-ins.	*Maintenance of services with IPC:* Adolescent-friendly health clinics should remain operational as usual. Adolescent Health Days should be modified to allow for social distancing and prevent overcrowding.
Reproductive health	Family planning	*Maintenance of services with IPC:* Injectable contraceptives, IUCD insertion, and sterilization services should be provided on demand to walk-in clients. *Adaptation of services:* Fixed-day services should be provided only at	*Maintenance of services with IPC:* All services should be provided following the social distancing guidelines. *Adaptation of services*: Fixed-day services can be provided to 10

Health area	Program activity	Recommendation and service status within containment/buffer zone	Recommendation and service status outside of containment/buffer zone
		designated facilities and limited to 10 people a day (this was later extended to 30 people a day). Extra packets (at least 2 months' supply) of condoms and OCPs can be handed to the clients to avoid repeated visits/repeated contact, and continuous supply should be ensured.	people a day. Additional sessions can be organized if needed. Extra packets (at least 2 months' supply) of condoms and OCPs can be handed to the clients to avoid repeated visits/repeated contact, and continuous supply should be ensured.
	Postpartum family planning	*Maintenance of services with IPC:* Sterilization and IUCD services should be provided to beneficiaries who are already in the facility.	*Maintenance of services with IPC:* Continue services as usual.
	Abortion care/ postabortion care	*Maintenance of services with IPC:* All designated facilities should provide comprehensive abortion care (should be provided on demand to walk-in beneficiaries). Postabortion IUCD should be provided concurrent with surgical abortions.	*Maintenance of services with IPC:* All services (spontaneous and induced abortions) should be provided in designated comprehensive abortion care facilities.

Abbreviations: 4Ds: defects at birth, diseases, deficiencies, and developmental delays including disabilities; ANC, antenatal care; ASHA, accredited social health activist; DEIC, District Early Intervention Center; HBNC/HBYC, home-based newborn care/ home-based care for young children; IPC, infection prevention and control; IUCD, intrauterine contraceptive device; MNCH, maternal, newborn, and child health; OCPs, oral contraceptive products; ORS, oral rehydration salts; PHC, primary health care; PNC, postnatal care; SAM, severe acute malnutrition; SNCU/NBSU, special newborn care units/newborn stabilization units.

Adaptations and innovative solutions

To balance the need to maintain essential health services with the urgent management of local COVID-19, global guidance recommends specific adaptations to how services should be routinely conducted. However, each country is experiencing the pandemic differently, and India, like many countries, has tailored its approach to meet its needs and priorities. Similarly, while this reflects national guidance on maintenance of EHS, there is subnational variation in how different states have chosen to adopt and operationalize this guidance.

Service delivery adaptations in all areas (within and outside containment zones)

Telemedicine and digital health

Policies recommended that telehealth and digital health services be used across all health areas as a means to provide alternatives to in-person visits to health facilities and follow-up care, reduce overcrowding and cross infection, provide psychosocial support, conduct training and capacity-building, prescribe drugs, and perform record keeping. Teleconsultations are suggested to be promoted for all RMNCAH-N services, specifically:

- For sick child care, ASHAs could contact telephonically to assess child for cough, cold, fever, breathlessness, and diarrhea.
- For children with severe acute malnutrition, follow-up needs to be done telephonically, and only children with medical complications should have a physical follow-up.
- For ANC visits during the last trimester, telephonic contact should be made by ASHAs/ANMs for women with high-risk pregnancies to ascertain status, and home-based follow-up should be provided if necessary. ASHAs/ANMs to follow all precautions while visiting the household.

The policy indicates that if further treatment is required or if follow-up care is required for any of the above conditions, patients are to be referred to a health facility. Specific policy guidance is given on by whom and how telemedicine visits may be conducted, including:

- Only registered medical practitioners who obtain consent from the patient are entitled to provide telemedicine consultations in any part of India.
- Consultations may be conducted through the following modes: local area network, wide area network, internet, mobile and landline phones, data transmission systems (email/fax), and any chat services (WhatsApp/Facebook Messenger/etc.).
- During telemedicine consultations, both parties must provide a mechanism for proof of identity.

While there is no specific guidance on operationalizing this program during COVID-19, the telemedicine policies recommended are an extension from the previously existing national telehealth service: eSanjeevaniOPD.[8] The platform was developed by the Centre for Development of Advanced Computing (C-DAC) in Mohali and the National Teleconsultation Service of MOHFW, with the goal of providing access to health care services in the home. Recent policy recommendations that suggest the use of telemedicine during COVID-19 expand this platform for general usage, and to include a wider range of communication platforms (such as telephone).

While India has unusually robust guidance and platforms to implement telehealth, there are still challenges in implementing telemedicine effectively. Recent research suggests that a minority of providers (especially in rural populaces) have begun using telehealth during COVID-19, despite extensive policy guidance.[9]

Questions to consider when evaluating the effectiveness of telemedicine:

- To what extent do people, especially women, have easy access to phones and/or other telecommunications and/or network connectivity to get proper care through telemedicine?
- How does the quality of care change when provided through telemedicine, particularly if not using video consultation?
- What mechanisms are there to enforce telehealth restrictions on unregistered medical practitioners?

Service delivery adaptations in COVID-19-impacted areas (within containment zones)

Task shifting to COVID warriors and home-based visits

Within containment zones, facilities are encouraged to divert patients to other means of care to prioritize COVID-19 care and limit possible contamination at clinics. To that end, outreach sessions are recommended to be paused, and clinic services for maternal and child care are recommended to be limited to walk-in patients only. The standard outreach done by community health care workers (ASHAs, ANMs, AWWs) are also suspended in containment zones, except for visits to high-risk pregnant women. In the case of high-risk pregnant women, telephonic contact should first be made during the third trimester, and a home visit scheduled by an ASHA or ANM if necessary.

To support this diversion of patients from facilities in containment zones, policies recommended shifting some routine tasks at the community level to "COVID warriors," a new cadre of volunteers specifically recruited to help India fight the pandemic. COVID warriors were introduced early in the pandemic to support the health care system and provide overarching support to all areas of civil society. There are currently 15,896,093 registered COVID warriors comprising a diversity of people, including traditional health care workers, medical students, ex-service personnel, nongovernmental organization workers, fire fighters, home guards, veterinary doctors, Anganwadi workers, and ASHAs—all volunteers.[10] The responsibilities of COVID warriors include generating awareness for testing, quarantine or social distancing, contact tracing, surveillance, door-to-door visits, and mapping of houses for high-risk cases. COVID warriors are required to complete an online training through the Integrated Government Online Training (iGOT) platform, which includes information on infection control and hygiene practices, personal protective equipment, and management of biomedical waste.[11] To ensure continuity of RMNCAH-N services in containment zones specifically, trained COVID warriors are recommended to make house-to-house visits to inquire about ANC, PNC, and newborn, young child, and nutrition care needs and link patients to required services. COVID warriors themselves are not indicated to provide care, but simply to act as an outreach and referral mechanism to ensure that those who need care are able to access it during containment.

The use of the COVID warrior cadre is a unique approach in India in that non–health care workers may be mobilized to support maintenance of services, but it is unclear what the implications are for acceptability of providing linkages to care by non–health care staff.

Questions to consider when evaluating the effectiveness of task shifting:

- What is the composition of the COVID warrior cadre, and what are the implications for the acceptability of providing linkages to care?
- What tools or training have COVID warriors received to adequately gather information, screen, and triage patient need for care?
- How does the referral system work for patients who do need care? Are COVID warriors able to provide adequate referral and linkage to the health system?

Home-based delivery of commodities and extended prescribing

In March 2020, India's MOHFW issued an order that pharmacies and dispensaries could sell their products directly to consumers and deliver goods (excluding narcotics, psychotropics, and other controlled substances) to consumers at their doorsteps. Sales had to be in the same administrative unit as the pharmacy's brick-and-mortar location. Concurrently, home-based delivery of commodities was recommended within containment areas to ensure continuity of services. A number of RMNCAH-N commodities are eligible for home delivery: iron–folic acid supplements, calcium, zinc, and oral rehydration salts. Many of the commodities that are recommended for delivery are those that would normally be administered during outreach campaigns or mass administration, which are suspended in containment zones, such as mass supplementation for vitamin A, T3 (test, treat, and talk) camps, deworming days, and Intensified Diarrhea Control Fortnight. To be clear, delivery of these commodities is not intended as a replacement of mass campaigns but rather a supplementary measure during deferral of regular activities.

In addition to home delivery of commodities, policies promote multimonth dispensing of medications for chronic conditions. For example, updated policies permit ASHA and AWWs to distribute iron–folic acid supplements or allowed contraceptives for two months at a time. While ASHAs were previously empowered to deliver certain contraceptives (condoms, oral contraceptive pills, and emergency contraceptive pills) and supplements to mothers, this adaptation expands the scope of delivery by allowing multiple months of medication to be provided at one time and minimize the contacts and visits to facilities. This adaptation ensures that patients get the medications and other commodities they need through home-based deliveries while also reducing patient contacts and limiting potential COVID-19 risk. One critical question is how delivery of commodities is to be done, and who delivers them. ASHAs and AWWs have historically been empowered to do so, but the expanded scope of deliveries may require more workforce. Alternate models for delivery were suggested for exploration—for example, hiring youth by district/block nodal officers as runners to pick up medicines from district warehouses/community health centers/primary health centers and supplying them to sub–health centers/ASHAs.

Questions to consider when evaluating the effectiveness of home-based delivery of commodities:

- How was the supply chain system able to handle advance provision of specific medications? Were there bottlenecks and where?
- To what extent did consumers choose to have drugs and commodities delivered at home?
- How feasible was it for pharmacies to identify and reach patients with commodity deliveries?
- Were there other changes that affected access (price, delivery fees, delivery times, missing deliveries, etc.)?

Extended service offerings

Special consideration was provided for ensuring the maintenance of acute emergency care among particularly vulnerable populations such as children and pregnant women who reside in containment zones. In containment zones where routine services are diverted from facilities, the policies recommended that peripheral health facilities coordinate to provide these services through an extended service model. It is recommended that peripheral health facilities—located away from "cluster" groups and toward the perimeter of the buffer zone—provide immunization, ANC, PNC, and screening services for

patients who are due for services. Peripheral health facilities may include sub–health centers, primary health centers, urban primary health centers, health and wellness centers, and urban health posts. Health facilities are recommended to coordinate and decide on a particular date, time, and location to hold service days. In addition, peripheral health facilities are encouraged to allocate fixed-day services for each village or ward area. Presumably, these peripheral facilities will serve as one potential linkage to care for those who are screened or referred by COVID warriors during home-based visits, though specific guidance was not observed. Anecdotally, several states also designated facilities for MNCH services for COVID-19 suspected or positive cases to avoid disruption of essential services, with guidance on providing separate areas for COVID-19 and non-COVID-19 services. Policies do not provide any guidance on the service limitations, operationalization, or duration/frequency of these peripheral facility offerings. However, the coordination between health facilities to create specialized service days has the potential to dramatically reduce the burden on individual facilities and ensure continuous care for patients who are most at risk.

Questions to consider when evaluating the effectiveness of extended service hours:

- What is the frequency and duration of the service days offered by peripheral health facilities?
- How are facilities designated to offer peripheral services days, versus designated for limited services?
- How are individuals residing in containment zones made aware of, referred to, or able to reach these periphery facilities for service days?

Recouping lost progress

India's stratified COVID-19 response caused significant disruptions to service delivery in containment/buffer zones, particularly for vaccine-preventable diseases among children and pregnant woman as outreach and standard health facility sessions were temporarily halted. The policies reviewed provided national guidance on post-COVID-19 immunization catch-up and recommended that lost progress in vaccination be recouped through catch-up vaccination sessions, beneficiary mobilization, and supply planning. For areas that were previously designated containment/buffer zones, catch-up vaccination sessions are recommended. Health facilities are advised to plan for multiple small sessions in the missed areas through Village/Urban Health, Sanitation, and Nutrition Days (VHSND/UHSND) or a scheduled routine immunization day. If staff shortages are a constraint, health facilities could hire additional health care workers and utilize mobile teams for hard-to-reach areas. To support the increased supply of vaccine clinics, it is also recommended that facilities focus on regenerating the demand for vaccinations at a community level through accredited social health activists and Anganwadi workers. ASHAs and AWWs should coordinate with catch-up campaigns to reduce sick patient attendance and overcrowding and to coordinate beneficiaries to adhere to appointment schedules. Lastly, vaccine supply was given special consideration to ensure vaccines were to be added to the COVID-19 priority list, and further instructions for restocking and maintenance of supply are outlined. However, it is not clear if catch-up campaigns (and associated stock changes) have been implemented yet.

Questions to consider when evaluating the effectiveness of recouping lost progress activities:

- How are the catch-up campaigns going to be financed?
- How will the new COVID-19 vaccination campaign (released January 16 through a press conference) factor into the recovery of progress for other routine vaccines?
- For vaccines that require multiple doses, will there be an effect on subsequent dropout for disrupted vaccinations?
- Will the COVID-19 vaccine be integrated into this program? Will these programs work together or as separate entities?

Moving forward: Questions for consideration

India's policies underscore the importance of continuing RMNCAH-N services while ensuring the safety of patients and health care providers within the context of COVID-19. Many of the suggested guidelines align with the World Health Organization's maintaining essential health services interim guidance.[12] The robust policy environment in India engendered the rapid development and deployment of policies to maintain health services, and subsequently has fostered continuing updates and adaptations to policies. The geographic scale and diversity have also resulted in more stratified and targeted approaches to maintaining EHS during COVID-19.

At the same time, the geographic scope and decentralized nature of India's health system also means that states likely have varying degrees of adoption and operationalization of policy recommendations. To date, there is not widespread evidence on how or where adaptations are being implemented. Fundamentally, the following questions should be considered to understand further the response to maintenance of EHS in India:

- To what extent are states adopting and implementing national policies? How do state or district policies differ?
- How have these policies been disseminated to the health facility/clinic level to ensure uptake of adaptations? How has supportive supervision or other management practices contributed to the implementation of these practices?
- How are containment zones established, monitored, and communicated to the general populace? Are the expectations around essential health services within containment zones communicated widely?

In addition to further evidence on how policies have been implemented at the state and district levels, there is limited evidence on which adaptations are the most feasible, acceptable, and effective for health workers and patients. Many of these adaptations show promise for delivering people-centered health care and have shown promising results in a non-COVID-19 context. However, further examination and study is required to understand which adaptations have the greatest impact in the COVID-19 context; potential research questions for each adaptation are noted throughout the brief.

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Annex: Policies reviewed

Policy document title	Publication date	Hyperlink (if available)
Immunization Services During and Post COVID-19	May 21, 2020	All policies available at https://www.mohfw.gov.in/
Guidance for General Medical and Specialised Mental Health Care Settings	April 13, 2020	All policies available at https://www.mohfw.gov.in/
AS&MD on Continuation of Essential Services	April 10, 2020	All policies available at https://www.mohfw.gov.in/
Enabling Delivery of Essential Health Services During the COVID-19 Outbreak	March 25, 2020	All policies available at https://www.mohfw.gov.in/
Guidance Note on Provision of RMNCAH and Nutrition Services During and Post the COVID-19 Pandemic	April 14, 2020	All policies available at https://www.mohfw.gov.in/
Note for India COVID-19 Emergency Response and Health System Preparedness Package	August 6, 2020	All policies available at https://www.mohfw.gov.in/
Guidelines for Medical Establishments During COVID-19	May 8, 2020	All policies available at https://www.mohfw.gov.in/
Notification of Allowance for Doorstep Delivery of Essential Drugs During COVID-19	March 26, 2020	All policies available at https://www.mohfw.gov.in/
Telemedicine Practice Guidelines	March 1, 2020	All policies available at https://www.mohfw.gov.in/