ACCESS FOR ALL

VOLUME 3:
What can community-based SAM treatment learn from other public health interventions to improve access and coverage?

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COVERAGE MONITORING NETWORK

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This third and final paper in the Access for All series turns to the wider public health sector in search of lessons learned about the strategies and tactics used to improve access and coverage of services. This paper is based on a literature review of journals and grey literature for a number of public health interventions, including malaria, HIV, tuberculosis, vitamin A, deworming, immunisations, family planning, maternal health and pneumonia. A separate, and much shorter review, also looked at measures within the community-based SAM treatment model which have already been adopted to increase access to services.

The review identified integration of public health interventions as the key overarching strategy used by services to improve access and coverage. Yet, the review also found a robust evidence base to suggest that to improve coverage additional tactical measures are used to bring about optimal levels of coverage. In particular, the review identified three key tactics used by public health services; Campaigns, Task-shifting and Incentivised Attendance.

The campaign approach, often implemented in the framework of child health days or weeks, has successfully increased the coverage of preventative interventions such as immunisations. 'Piggy-backing' low coverage interventions on to more successful interventions has led to a significant rise in the former's coverage rates. SAM treatment can and has already incorporated aspects of the campaign approach, in particular to help increase awareness of services and for case-finding. Further utilisation of this approach by SAM treatment services is likely to remain limited to these areas.

Task-shifting is currently experiencing a revival as the evidence shows that moving simple tasks to less qualified workers, particularly community health workers, can result in increased user access. Community Case Management (CCM) has improved case-finding, removed geographical and temporal barriers as well as tapped in to community resources to improve health seeking behaviour. But the use of Community Health Workers (CHWs) for CCM is no guarantee of increased coverage. Moving treatment to the community can reduce patient anonymity and also to achieve a sustainable change, careful management of a cadre of CHWs is required. SAM treatment services have explored the delivery of care through CHWs in a number of pilot projects implemented by NGOs, with very positive results. Further evidence is needed, however, about the performance, feasibility and cost-effectiveness of this approach when implemented at scale.

The evidence for incentivised attendance increasing access is still weak, but there is a growing body of data demonstrating its use as an approach to increase access to services. Part of the rationale behind the provision of its incentives comes from its ability to improve equity of access and to remove the financial burden of seeking care. Yet, the additional inputs required for this approach raises queries about the cost-effectiveness and sustainability of the approach when implemented at scale. The review found limited evidence of this approach being used by SAM treatment services.

Overall, the review identified a number of valuable measures that have enabled public health services to improve access and coverage. Many of these measures have already been incorporated or explored (in one form or another) by SAM treatment services yet more innovation and experiences are needed. But it's not only about doing things differently; the review also calls for greater efforts to optimise existing models of care. Before dramatic changes are introduced, current SAM treatment services can and must be optimised in order to establish their full capacity to provide accessible care. Whatever the degree of change needed, perhaps the most important lesson that SAM treatment can learn from other interventions is that improving coverage comes at a cost. How much, and how best to use resources are two of the most important questions to answer in the quest to provide access for all.

The first two volumes of this Access for All series reviewed the performance of the community-based SAM treatment model over the last decade and the experiences of those using it. The first volume reviewed clinical effectiveness and coverage data from programmes across the globe between 2000 and 2013, to identify whether the current model was capable of meeting global needs. It concluded that:

1 *SAM cases admitted into treatment services today are as likely to be successfully cured as they were a decade ago.*

2 *In spite of their dependency on context-specific operational factors, Ministry of Health delivered community-based SAM treatment services continue to be cost-effective interventions.*

3 *The capacity of treatment services to meet global SAM needs depends on coverage being significantly and consistently improved.*

The second volume reviewed data from coverage assessments in over 20 countries to identify the five most frequently reported barriers to access. These were found to be:

- *Lack of awareness of malnutrition and services.*
- *High opportunity costs.*
- *Distance.*
- *Previous rejection and staff/beneficiary interface.*
- *RUTF stock-outs.*

To provide a more personal perspective on these barriers, qualitative research was undertaken in Ethiopia, Pakistan and Kenya. The way in which community-based SAM treatment services were implemented in these three countries varied, but the barriers were found to be similar. This suggests that the current service delivery model, while significantly more accessible than previous in-patient models, continues to face challenges in offering accessible services to those who need them. The paper also showed that these challenges are not unique to SAM treatment services, but have also affected other public health interventions.

This third and final volume sets out to review the experiences of other public health interventions in addressing these barriers and improving their coverage. The aim is to identify experiences from other interventions which could potentially strengthen the community-based SAM treatment model to reach more SAM affected children than ever before. In recogising interventions which have been able to increase access[1] and achieve high treatment coverage, this final instalment aims to identify lessons learned and explore their applicability to the current SAM treatment model.of those seeking care.

This paper is based on a literature review of the following public health areas to identify ways in which coverage and access have been improved: malaria, HIV, tuberculosis, vitamin A, deworming, immunisations, family planning, maternal health and pneumonia. The review assessed both journals and grey literature[2] to capture a broad range of measures used to increase access to services (for further details on the methodology of the literature review, see Annexe 1).

This review does not focus on any particular barriers to access and specific measures to overcome those barriers. First, because not all of the literature on this topic clearly details barriers faced and how they were overcome. Second, because barriers to access are unique to each context and multiple barriers interact in different ways with different outcomes, limiting the ability (and usefulness) of replicating context-specific measures. Instead, the paper focuses on the means by which services have overcome a collective set of barriers that are generally shared by SAM treatment services and other public health interventions.

The data covered in the review is potentially subject to publication bias, with more successful programmes and results more likely to be reported than less successful ones. Additionally, the literature does not allow the grading of the strength of evidence as it is largely descriptive rather than evaluative. Finally the subject of equity of access (related to education, income or gender for example), was not explored in this paper due to a lack of sufficient and/or reliable evidence in the context of SAM treatment and other interventions.

Photo: Susan Vera

[1] *This paper refers to 'access' which is a combination of uptake and adherence. Uptake refers to the first visit to treatment services for that episode of the disease but adherence is the extent to which patients continue with treatment. Only if an intervention specifically states that it is addressing either barriers to uptake or adherence will this paper differentiate between the two.*

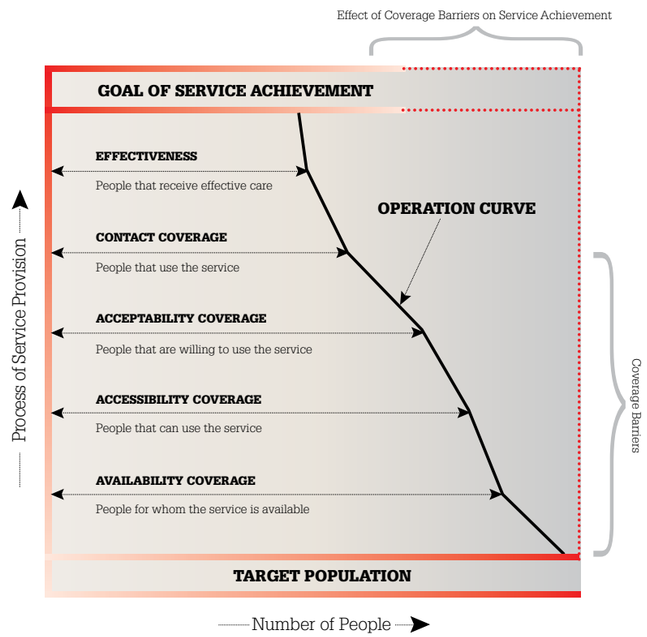
[2] *Any literature which is produced but that is not controlled by commercial publishers. In this context it includes NGO and UN reports, PhD theses, conference proceedings and magazine articles.*

Access, barriers to access and coverage are interrelated concepts. Low coverage is generally a result of service users experiencing barriers to access. If they are unable to access services (see Box 1), whether initially (uptake) or periodically (adherence), coverage is limited.

Improving access is considered a major public health and development objective as a means of increasing coverage of effective interventions (2, 3) and enabling a reduction of child mortality. (4, 5) The low coverage experienced by many community-based SAM treatment programmes is not unique in the field of global health. All interventions have grappled with the issue of access and how to achieve sustained high levels of coverage. In recent years, the issue of access has gained particular attention in the context of SAM treatment, and it received a significant boost with the inclusion of wasting reduction in the WHO Global targets[3] and the emphasis the 2013 Lancet series on Maternal and Child Nutrition placed on increasing the coverage of ten nutrition-related interventions as a means of reducing the total number of under-five deaths. (6) The series provided little or no indication on how to scale up these interventions, but there is evidence to suggest that achieving high coverage in large-scale public health interventions is feasible (as demonstrated by the success of immunisation coverage (7-9) and that reliable delivery systems are critical to doing so. (2, 10) Therefore this section looks at the measures used by different public health interventions to improve service delivery and the implications for present and future SAM treatment services.

FIGURE 1

Tanahashi's coverage diagram illustrating the effect of different kinds of coverage barriers on services (1)



[3] *The WHO's Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition target 6 was to reduce and maintain childhood wasting to less than 5% by 2025. This was endorsed by the World Health Assembly (WHA), Resolution 65.6 in May 2012.*

How have other interventions improved access & coverage?

Generally speaking, integration of different public health interventions has received significant attention in recent years (3, 11) as it has been recognised that a patient-centred health system strengthening approach is necessary to achieve sustained universal access. (12-15) This avoids numerous vertical structures draining resources from the public health system as well as ensuring maximum efficiency of limited financial and human resources. (14) Integration can take many forms: the grouping of multiple services (e.g. IMCI or EPI[4]), the combination of a few related services (e.g. HAART for HIV and DOTS for TB[5]) or the basic integration of vertical programmes into the health system. Although there are challenges to integrating services effectively, in particular when working with weak health systems, (2, 16) integration has been found to provide a strong foundation for achieving high service coverage.

But integration in itself is not enough. More specific tactical measures, which can themselves be integrated, are also required to increase access to services. A review of the literature found three key mechanisms which have been successfully employed: Campaigns, Task Shifting and Incentivised Attendance. These approaches are neither mutually exclusive nor the sole means through which to increase access and coverage, yet they represent some of the leading and best proven tactics employed by public health interventions.

BOX 1 » INTEGRATION

There are two types of programme delivery: vertical and horizontal. Vertical programmes are disease focused (17) whereas the horizontal approach provides services as part of a broader patient-centred package as part of public financed health systems and are commonly referred to as comprehensive primary health care. (18)

Health service integration has been defined as "a variety of managerial or operational changes to health systems to bring together inputs, organisation, management and delivery of particular service functions. Integration aims to improve the service in relation to efficiency and quality." (19)

Two sub classifications of integration are (19):
1. **The merging of two types of health care services.**
2. **The merging of a vertical programme in to the health system.**

Photo: Gonzalo Hihr 2010

[4] *Integrated Management of Childhood Illness (IMCI) and Expanded Programme on Immunisations (EPI).*
[5] *Highly active antiretroviral therapy (HAART) and Directly Observed Treatment, short course (DOTS) are community-based approaches to provide intensive treatment to HIV and TB patients respectively.*

Campaigns

The campaign approach delivers single public health interventions or a combined package (20) to children under-five in line with the context's epidemiological profile. Health sector staff are often employed in implementation, although technical support has also come from development partners. (21) A combined approach provides an intensified 'one stop' delivery of interventions resulting in Child Health Days or Weeks. (8) Health facilities, temporary outreach posts and mobile clinics are all used to implement these campaigns, generally at six month to one year intervals. Usually the interventions included are those that are preventive (21) and can be delivered periodically which include vaccinations, vitamin A supplementation, bed net distribution and HIV/AIDS awareness among others. (8)

Campaign days were introduced in response to declining coverage of effective interventions and have proven successful in increasing coverage. (21) Their advantage is that they can be used when health systems are weak and there is limited capacity to provide the services as part of a complete package in the health centre. (21, 22) They tend to target high risk populations but also those that are hard to reach with formal health services, such as rural populations. (23) The community is often heavily involved in the day by spreading information about upcoming services and identifying anyone not attending services, which encourages a high level of attendance. (24) Attaching an intervention to a pre-existing and well performing campaign, known as "piggybacking", is an increasingly common approach for one intervention to gain from another's success. Immunisation campaigns' success in many resource-limited countries has made them the logical choice to which interventions are attached. (8) For example in Zambia the integrated delivery of immunisation and insecticide treated nets resulted in an 18% increase in coverage for the former and a 63% increase for the latter, after a one week intervention. (25)

There are however limitations to the campaign approach. The ability to replicate this model with other interventions is limited to those which only require one-off, blanket interventions at six monthly or annual intervals. Moreover, if piggybacking is used, interventions must be carefully matched and one must already be performing well. (25) Choosing such interventions is a complex process (8) and if a weak service is chosen with which to integrate it may 'break' that service. For example in Tanzania, Vitamin A supplementation coverage increased from 13% to 76% over four years after it split from a routine EPI programme resulting in two separate campaign health days. (29) Campaigns can also interrupt routine services as staff move to outposts to take part in the campaign, leaving normal services under resourced and likely to be under performing. (30) A campaign day in Senegal, for instance, failed to increase coverage due to the requirements and the emphasis given to the day also disrupted routine services. (22) Campaigns should be implemented so that they build health staff capacity rather than detract from the health system and services. (21) Funding is often provided on this understanding but there is evidence to suggest that the planning and execution of such campaigns can become a significant burden on health staff. (30)

The use of this campaign model or piggybacking SAM treatment onto other campaigns would be challenging. Due to the nature of the disease, SAM treatment requires early case finding followed by treatment time being tailored to the needs of each case with check-ups over multiple weeks. The limited timeframe of campaigns and their temporary nature makes such treatment difficult to deliver as part of that approach. There are, however, aspects of the campaign approach which could and have already been adopted by acute malnutrition treatment services with regards to the outreach component. For example in Ethiopia the Enhanced Outreach Strategy (EOS) consisted of a six monthly campaign providing Vitamin A supplementation, deworming treatment and screening for Moderate Acute Malnutrition (MAM) in children under five and Pregnant and Lactating Women (PLWs), implemented with the aim of increasing the coverage of these activities. (31) Coverage of all interventions increased over a five year period although there were some challenges to implementation which require further attention if this integrated campaign strategy is to be adopted on a larger scale. Opportunities for including screening in the activities of other sectors are also being explored. For example the Permanent Interstate Committee for Drought Control in the Sahel has recently held a workshop on how to mainstream nutrition indicators into agricultural surveys. (32) It is clear that the campaign approach has the potential to improve coverage of malnutrition treatment by raising awareness of services in the community, improving health seeking behaviour and increasing service uptake and adherence.

BOX 2 **» CAMPAIGNS** and their impact on coverage

- **Vitamin A interventions are often delivered through bi-annual campaign days. (26) In Nepal very high coverage (80-93%) was achieved compared with previous delivery methods where coverage was as low as 13%.(21) Similarly high coverage (90%) was achieved in Sierra Leone when vitamin A supplementation was delivered twice-yearly as part of a Maternal and child health week. (27)**
- **High levels of global immunisation coverage have also in part been attributed to the campaign day delivery method. (28) Previously in many countries, immunisations were delivered through routine services but campaign days were used in a bid to increase coverage from around 60% to >90%. (21)**
- **Polio immunisation days now often take place twice a year and can achieve more than 90% coverage, (8) although a rate this high is not usual. (21)**
- **Integration of campaigns has also increased coverage. For example Vitamin A combined with immunisations has achieved good results as well as the coverage of deworming considerably increasing since their addition to Child Health Days. (21)**

Task Shifting

Task shifting is generally defined as the reassignment of clinical roles to less qualified health workers (nurses, lay counsellors or even patients themselves) in the absence of sufficient human resources, with the aim of increasing access to services. (33) The 1978 Alma Ata Declaration[6] turned global attention to task shifting, more specifically Community Health Workers (CHWs), in the 1980s to increase access to primary health care. However the structural support required for their effective implementation was largely absent at the time resulting in a short lived success. But three decades later, support for this approach is growing again.

Community Case Management (CCM) is a type of task shifting where cases of various diseases are managed in the community by CHWs using treatment algorithms. Previously these cases would have been managed by a trained medical professional but adapted and simplified treatment algorithms allow for CHWs to manage multiple aspects of the cases, such as diagnosis and counselling, directly. This approach was originally used for individual interventions, but its integrated version (iCCM) combines the treatment of conditions which have high child mortality: pneumonia, diarrhoea, malaria, neonatal causes and under nutrition. (34) The interest in CCM/iCCM is rapidly growing with ongoing research projects identifying the most appropriate conditions for success.

CCM has been found to increase access to services. Providing case finding and treatment at the community level has reduced both geographic and temporal barriers as well as opportunity costs of care. (35, 36) This enables prompt treatment which can reduce the severity of disease and thus the need for more extensive treatment. (35, 37) Another advantage is that CCM uses existing community structures and relationships to encourage health seeking behaviour, and thus increase access. The influence of Traditional Birth Attendants (TBAs) in Rajasthan, for example, where more than 90% of women that decided not to seek care did so on the advice of their TBA, (38) demonstrates the influential role community members have to play in increasing access to services within their community. Additionally home based treatment is started much more rapidly than any administered by a medical professional (39, 40) particularly if CHWs are situated in hard to reach areas. This is particularly important for treatment which needs to be administered promptly after first symptoms develop. In turn, home based treatment reduces the burden on health facilities (e.g. malaria). (41)

[6]The Alma Ata declaration came out of the International Conference on Primary Health Care, held in Alma Ata, Kazakhstan, which encouraged governments and international bodies to achieve 'Health for All' through a specific focus on primary health care.

BOX 3 **» TASK SHIFTING** and its impact on coverage

- **IMMUNISATIONS: In Mexico CHWs delivering immunisations increased coverage of fully vaccinated children less than one year old from 21%-93.5%. (42)**
- **MATERNAL HEALTH: In Myanmar, among internally displaced communities an innovative three tier CHW scheme was implemented to increase access and coverage. The intervention resulted in substantial increases in access, specifically a ten-fold increase in births attended to by a trained provider. (43)**
- **PNEUMONIA: In Zambia, CCM implementation led to a five-fold increase in cases of non-severe pneumonia receiving early and appropriate treatment. (44)**
- **FAMILY PLANNING: As early as the 1970s in Bangladesh a cadre of married female CHWs was recruited and trained to provide contraception (pills and condoms) in the community. The system increased access to services with nearly half of pill users receiving them at their door. (45)**
- **TB: CHWs or friends directly observe TB sufferers taking their medication to ensure adherence and they have played an essential role in the DOTS strategy by increasing access to treatment. (46-48)**
- **HIV: Regular home visits are made to monitor patient progress, provide adherence support and to deliver drugs. (49) A synthetic review found CHWs to increase both uptake and adherence to HAART treatment. (50)**

However those receiving community based interventions can still face barriers to access. For example in the DOTS programme, patients are still often required to make a visit to health facilities. Factors identified as continuing to limit uptake include distance to facilities, stigma of receiving treatment and a lack of knowledge about TB and services. (46, 51-53) There is not yet enough evidence to understand exactly which tasks carried out by community and peer support initiatives contribute to durable access. (50) Further empirical research is needed to evaluate this in order to extend its success to other sectors. (50) There are also some negative outcomes to community-based treatment such as the reduction of anonymity for patients which may hinder some from accessing treatment. Experience has shown that patients for whom this is an issue seek treatment in a different area (54) which may be problematic with entirely community-based services. There is also a concern that attention will be taken away from improving access to health facilities, leading to calls for treating the community approach as an add-on to facility based care. (55)

Maintaining CHW effectiveness while achieving sustainable programme scale up has proved one of the biggest challenges (56) and the introduction of CHWs alone is not enough to ensure increased coverage, nor do they represent necessarily a low resource and trouble free option. (50) CHWs workload, (4, 57) attrition, (56, 58) selection, (59) training (60) and supervision (10, 35, 61) have all been found to significantly influence the performance and outcome of CHW delivered interventions and need to be addressed with care.

SAM treatment has been delivered by CHWs with documented experiences in Malawi, Bangladesh, Angola and South Sudan. (62) But experience and evidence is limited and the ability of national health services to incorporate SAM treatment through CHW systems or through iCCM mechanisms requires further research. There are also signs of implementers attempting to further decentralise case finding by passing the role on to carers themselves. (63) Although the research is in the early stages, signaling a commitment to exploring ways of strengthening community outreach.

Incentivised Attendance

Vouchers, conditional cash transfers and food incentives are increasingly used to encourage attendance at health clinics and can target specific population groups. Carers are given cash, food or vouchers to increase service utilisation by covering financial or opportunity costs of reaching care such as transport or salary lost but they can also be given additional bonus items to encourage attendance. This approach has largely been used for preventive interventions (64) and to overcome direct financial costs of care.

BOX 4 **» INCENTIVISED ATTENDANCE** and its impact on coverage

- **In Nicaragua food incentives to increase clinic attendance improved coverage to 94.1% (from 77%) although attendance dropped with increasing distance from the clinic. (66)**
- **In India a study showed that when reliable services were available, modest incentives increased uptake in children aged 1-3 years. (67) Villages receiving the food incentives had a coverage rate 21% higher (18%-39%) compared with a village only receiving reliable services. Notably, a larger incentive appeared not to have an effect on uptake. (67)**
- **In Mexico, carers received a conditional cash transfer and children received a food supplement for attendance at vaccination services leading to an increase of three percentage points in measles vaccination after the first six months of the programme. (7, 68)**
- **In Uganda the introduction of vouchers to pregnant women to cover transport costs (community members with access to a motorcycle) led to an increase of deliveries in health facilities from <200 deliveries/month to over 500. (69)**

The main advantage of this approach is that it enables targeted access for disadvantaged or vulnerable groups, thus improving equity of access. (64) It can also take the burden away from carers by paying transport costs and salary loss. (65)

The main limitation to these strategies is that they rely on additional inputs which require funding which may limit long term sustainability of the approach. (70) This in turn raises questions concerning the most appropriate size of transfer as well as the cost-effectiveness and sustainability of the approach. (68) Additionally with vouchers there is a risk of 'leakage' as they can run on to the black market. (65)

Voucher provision as a tool to encourage attendance at health services is a relatively new initiative and there are limited studies analysing its effectiveness. (64, 65) The need for further evidence in different contexts for incentives in whichever form is critical as there is evidence of them failing to improve access. A study in Timor Leste, for example, found food incentives had no effect on adherence to tuberculosis treatment, (71) although this difference in outcome may be explained by the requirement for multiple visits for TB treatment compared to one-off visits or short courses needed for vaccines. (67) Moreover, it is essential that services are open and available under this scheme which is not always the case. The limited evidence leaves it unclear as to how successful results can be generalised. (67)

The review found no documented evidence of incentives and vouchers having been used by SAM treatment services to incentivise attendance. There are, however, some examples of incentives or services adaptations to reduce the burden of seeking treatment being used by community-based SAM treatment programmes (in particular NGO-supported programmes) to reduce the impact of barriers to access including attendance. For example bi-weekly distribution has been offered for carers if they are unable to attend each week which is an example of fitting services around services users rather than vice versa. (72)

Over the last decade, SAM treatment has adopted many of the wider lessons learned by other public health services. The integration of services, for example, is a strategy that has already been used by SAM treatment and the rapid increase over the last decade in the number of global SAM cases receiving treatment is a sign that this strategy works. But if we are to learn anything from other public health services, it is that relying on this strategy is not sufficient to achieve coverage; tactical measures are needed to ensure that levels of coverage and equity of coverage continue to improve. SAM treatment services have already begun to recognise this incorporating some of the measures used by other services including elements of Campaigns, Task Shifting and Incentivised Attendance, but more far-reaching efforts to integrate these tactics in to the treatment model are still needed.

The experience of the campaign efforts of other interventions demonstrates the need to think beyond simply establishing permanent delivery points and relying on outreach. Campaigns demonstrate that we have to go further, to understand and address the barriers that prevent access and to reach out to those for whom these facilities remain inaccessible. If SAM-treatment services are to increase awareness and attendance, community mobilisation and sensitisation efforts will need to be adequately resourced to be effective. In the long-term, integrating SAM-related messages and case-finding into existing health campaigns, and other sectors such as agriculture, will be essential to boost awareness and uptake of services sustainably and at scale.

Decentralisation and shifting tasks to community health workers is already proving itself to be a crucial tactic used in other services. The experiences in integrating SAM treatment into iCCM, however, have been few and far between with limited or no wide-scale efforts to do so as part of national health systems. The question is not whether adequately trained, supported and supervised CHWs can successfully deliver SAM treatment, but whether such an approach can deliver equally positive and sustainable results once implemented at scale. More research and wider dissemination of lessons learned so far is urgently required. Similarly, other complementary service delivery methods including the use of mobile clinics and empowering carers to identify malnutrition in their own children must continue to be explored.

But it is not only about doing things differently, it is also about doing things better. SAM treatment services can learn a lot from initiatives that incentivise attendance, at least in terms of reducing existing financial and non-financial costs of attending. There are many examples of simple yet powerful efforts made by SAM treatment services to do precisely that, including bi-weekly distribution to reduce carer opportunity costs. These efforts must continue but they must also be adequately documented and shared to ensure that the SAM treatment model continues to evolve.

Photo: Diane Moyer, ACF Burkina Faso.

Over the last three decades, SAM treatment has experienced dramatic technical and operational changes. During this period, the number of services available around the world has rapidly increased and today over 60 countries around the world provide SAM treatment as part of its health services. In spite of these rapid changes, treatment services are estimated to reach less than 15% of all SAM cases worldwide. (73) Against this backdrop, the Access for All series set out to answer a series of fundamental questions about the capacity of SAM treatment services to provide accessible care to those in need.

The first volume reviewed clinical effectiveness and coverage data from programmes across the globe between 2000 and 2013, to identify whether the current model was capable of meeting global needs. It concluded that:

1 *SAM cases admitted into treatment services today are as likely to be successfully cured as they were a decade ago.*

2 *In spite of their dependency on context-specific operational factors, Ministry of Health delivered community-based SAM treatment services continue to be cost-effective interventions.*

3 *The capacity of treatment services to meet global SAM needs depends on coverage being significantly and consistently improved.*

The second volume reviewed data from coverage assessments in over 20 countries to identify the five most frequently reported barriers to access. These were found to be:

- *Lack of awareness of malnutrition and services.*
- *High opportunity costs.*
- *Distance.*
- *Previous rejection and staff/beneficiary interface.*
- *RUTF stock-outs.*

The way in which community-based SAM treatment services are implemented around the world may vary, but the barriers were found to be generally consistent. This suggests that the current service delivery model, while significantly more accessible than previous in-patient models, continues to face challenges in offering accessible services to those who need them. The paper also showed that these challenges are not unique to SAM treatment services, but have also affected other public health interventions.

The third and final volume of the series set out to review the experiences of other public health interventions in addressing some of these barriers to access. The review found that integration, in different forms, is an essential step in improving the coverage of public health services. But the review also found evidence that additional measures or tactics are needed in order to ensure optimal coverage. Tactics such as Campaigns, Task Shifting and Incentivised Attendance have proven successful in increasing access to multiple services. SAM treatment services themselves have already integrated many of these lessons, but more far-reaching efforts are needed to really benefit from the opportunities presented by these approaches.

Whatever the degree of change needed, perhaps the most important lesson that SAM treatment can learn from other interventions is that improving coverage comes at a cost. The experience of the Global Fund for HIV, Malaria and Tuberculosis, for instance, has shown what adequately resourced initiatives can do in rolling back these diseases. At a time of increased integration and collaboration between public health initiatives, the costs and funding strategies for high-coverage SAM treatment need to be better understood. How much, and how best to use resources to increase coverage are two of the most important questions to answer in the quest to provide access for all.

Photo: Gonzalo Hihr 2010

Key terms were used to search Google Scholar and PubMed. The search produced limited literature outlining experiences in improving access so it was followed up with the snowball technique, searching bibliographies for relevant articles. Experts in the field also provided guidance to ensure that the search encompassed as much of the relevant literature as possible. If once the evidence was reviewed more information was required on specific intervention models, further searches were undertaken so to make this review informative and practically useful.

Inclusion and exclusion criteria

- **Inclusion criteria:** English language 1980-2013, published and grey literature, all geographical areas. Nine review topics produced a large amount of literature and so due to time constraints, the review was not exhaustive and aims to give a representative picture of delivery models employed to improve access.
- **Exclusion criteria:** As CMAM is provided free of charge at the point of use, literature addressing financing mechanisms has been excluded. Similarly methods to increase access which involve the private sector (social marketing and training of private retailers).

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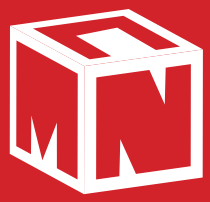
Whatever the degree of change needed, perhaps the most important lesson that SAM treatment can learn from other interventions is that improving coverage comes at a cost.

Photo: Gonzalo Hihr 2010



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