



Elizabeth Cuffy, Fundaye Community, New Kru Town, Liberia. Credit: Renata Rendón/Oxfam

# NEVER AGAIN

## Building resilient health systems and learning from the Ebola crisis

It took the threat of a global health crisis to illustrate the failings of Africa's health systems. Resilient health systems, free at the point of use, are evidently a global public good. They are essential for the provision of universal health coverage and for a prompt response to outbreaks of disease.

Resilient health systems require long-term investment in the six key elements that are required for a resilient system: an adequate number of trained health workers; available medicines; robust health information systems, including surveillance; appropriate infrastructure; sufficient public financing and a strong public sector to deliver equitable, quality services. Global investment in research and development for medical products is also critical.

# SUMMARY

It is just over a year since the Ebola virus took hold in West Africa, spreading fear across the region and beyond. As of April 2015, the disease had claimed the lives of more than 10,500 people, mainly in Liberia, Sierra Leone and Guinea, and has devastated communities at both an economic and a psychosocial level.<sup>1</sup>

The Ebola outbreak has been an exceptionally challenging 'stress test' of the ability of health systems in the affected countries to respond to such an emergency, and also a severe test for the international community.

How did health systems perform in this critical test? What has been learned from the Ebola crisis to ensure that future health systems have the resilience to safeguard the health needs of all populations faced with major threats to public health?

Long before the crisis, access to health services and to safe drinking water and sanitation in West Africa were inadequate. There were marked inequalities between regions, socioeconomic groups and genders.<sup>3</sup> The cost to individuals of paying for health services led to increased poverty and greater levels of inequality. Many health centres, if they existed at all, were unable to safely provide the services needed, as they lacked staff, medicines and health information. This situation is reflected in the lack of capacity in these countries to manage childhood infections and deliver safe births.

When Ebola struck, the affected countries had little capacity for surveillance, laboratory testing, contact tracing or infection control. Fear, stigma and a lack of trust in health facilities delayed effective responses.<sup>5</sup> Health systems were unable to handle the emergency, let alone continue to run existing services. Vaccination programmes, for example, have been suspended, making a million children in the worst affected countries vulnerable to measles.<sup>6</sup> Affected countries were unable to contain Ebola within their borders.

Chronic low public expenditure on health has diminished the availability, affordability and quality of health services, leading to both a lack of facilities and medicines and the introduction of user fees. As a result, people living in poverty are forced to seek care elsewhere, often from unqualified private providers. People face a choice between suffering ill health and bearing the cost burden of paying for poor-quality healthcare. Such choices drive people further into impoverishment and exacerbate inequality.

It is therefore clear that re-prioritizing investment in healthcare is for a global public good, protecting people's health and preventing the spread of diseases. This requires long-term commitment from national governments and international donors to support resilient health systems and ensure universal coverage of health services that are free at the point of use and have the ability to respond to outbreaks of disease. The

*Sierra Leone has the highest under-five mortality rate in the world: one in three children dies, mainly from malaria, diarrhoea or pneumonia.<sup>2</sup>*

*Before the Ebola outbreak, out-of-pocket payments reached 35 percent of total health expenditure in Liberia, almost 65 percent in Guinea and 76 percent in Sierra Leone.<sup>4</sup>*

Ebola crisis has shown that global action to protect health is essential, since infections do not respect borders.

The Ebola crisis has revealed several critical issues that should be integrated into national planning. For example, community engagement in the protection and promotion of health has been vital in controlling the outbreak. Community health workers (CHWs) and volunteers have played a key role in controlling the spread of infection by disseminating accurate information, undertaking surveillance and contact tracing and promoting hygiene practices and safe burials. Respondents to Oxfam research in the Montserrado district in Liberia, for example, stressed the importance of continued social mobilization and of disseminating hygiene information.<sup>7</sup>

## Six foundations for resilient health systems

Resilient systems require six essential elements:

- An adequate number of trained health workers, including non-clinical staff and CHWs;
- Available medical supplies, including medicines, diagnostics and vaccines;
- Robust health information systems (HIS), including surveillance;
- An adequate number of well-equipped health facilities (infrastructure), including access to clean water and sanitation;
- Adequate financing;
- A strong public sector to deliver equitable, quality service.

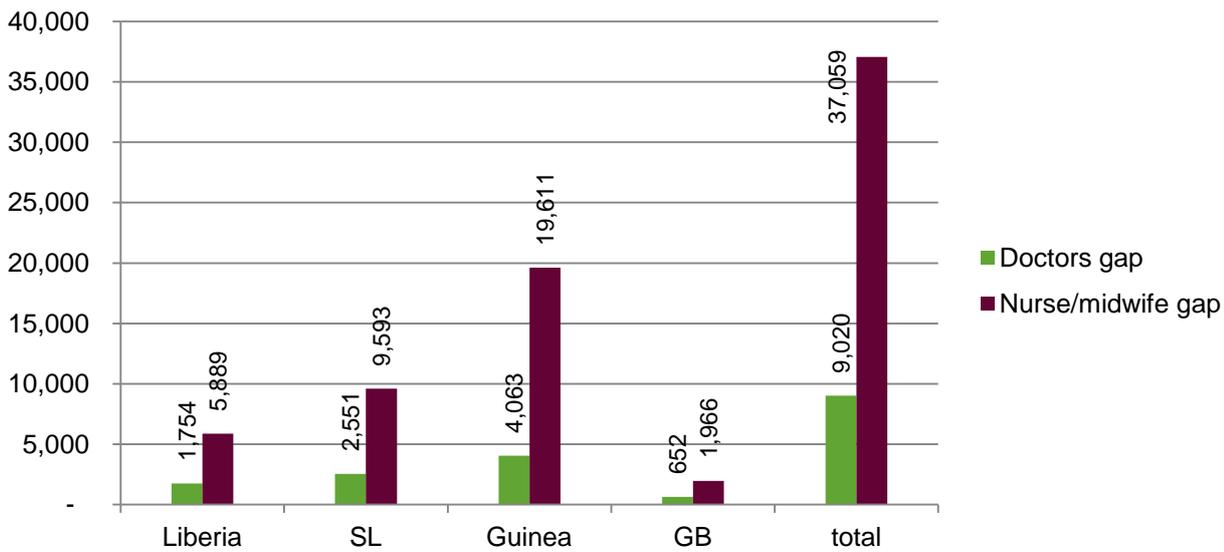
**An adequate number of trained health workers:** Based on the WHO standard of a minimum of 2.3 doctors, nurses and midwives per 1,000 people, Oxfam has calculated the health workforce gaps in the worst affected countries and the costs of training the missing clinical staff and paying their salaries over 10 and 20 years (see Annex 1 in main paper). Liberia, Sierra Leone, Guinea and neighbouring Guinea-Bissau require \$420m to train the 9,020 medical doctors and 37,059 nurses and midwives needed to fill the gaps in their workforce. Once they are trained, a total of \$297m annually would be needed to pay their salaries for 10 years.

The health workers gap is not unique to these countries. Africa has the highest disease burden in the world, but has only 3 percent of the global health workforce.<sup>8</sup>

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**Figure 1: Estimated gap in numbers of doctors, nurses and midwives in Liberia, Sierra Leone, Guinea and Guinea-Bissau**



Note: Estimates by Oxfam, based on the WHO minimum standard of 2.3 doctors, nurses and midwives per 1,000 persons. See Annex 1 in main paper for calculations.

**Access to sufficient medical supplies, including medicines, diagnostics and vaccines:** The Ebola crisis highlighted the failure of the global research and development (R&D) system. The system depends on monopolies of intellectual property (IP), and therefore commercial interest, to incentivize pharmaceutical companies to conduct research into new products. Clearly there is no commercial interest in R&D for Ebola. In the meantime, these IP monopolies enable companies to dictate high prices for new products. The Ebola crisis illustrates the need to change this system so that public health needs dictate the global research agenda and prices of new products are affordable. The current vaccines and medicines being tested for Ebola have been developed using public financing, but it is unclear how the pharmaceutical companies will set the prices of these potential products.

*There are 0.8 hospital beds per 10,000 people in Liberia and 0.3 in Guinea. This is compared with an average of 50 beds per 10,000 people in OECD countries.<sup>9</sup>*

**Robust HIS:** Weak surveillance capacity, coupled with community fear and lack of trust in health services, made it difficult to obtain accurate data during the Ebola crisis. Data collection depends on trained and motivated health workers and on community engagement in the process. Effective surveillance must be an integral part of information systems. Robust HIS are essential for decision making on policies and resource allocation

**An adequate number of well-equipped health facilities (infrastructure):** Statistics on hospital bed ratios illustrate the low coverage of health infrastructure in the Ebola-affected countries. There are 0.8 hospital beds per 10,000 people in Liberia and 0.3 in Guinea. This is compared with an average of 50 beds per 10,000 people in OECD countries.<sup>10</sup> Building resilient health systems means scaling up the number of well-equipped health posts and district hospitals to provide appropriate coverage of community health needs. Clean water, sanitation and hygiene promotion must be explicitly included within infrastructure plans.

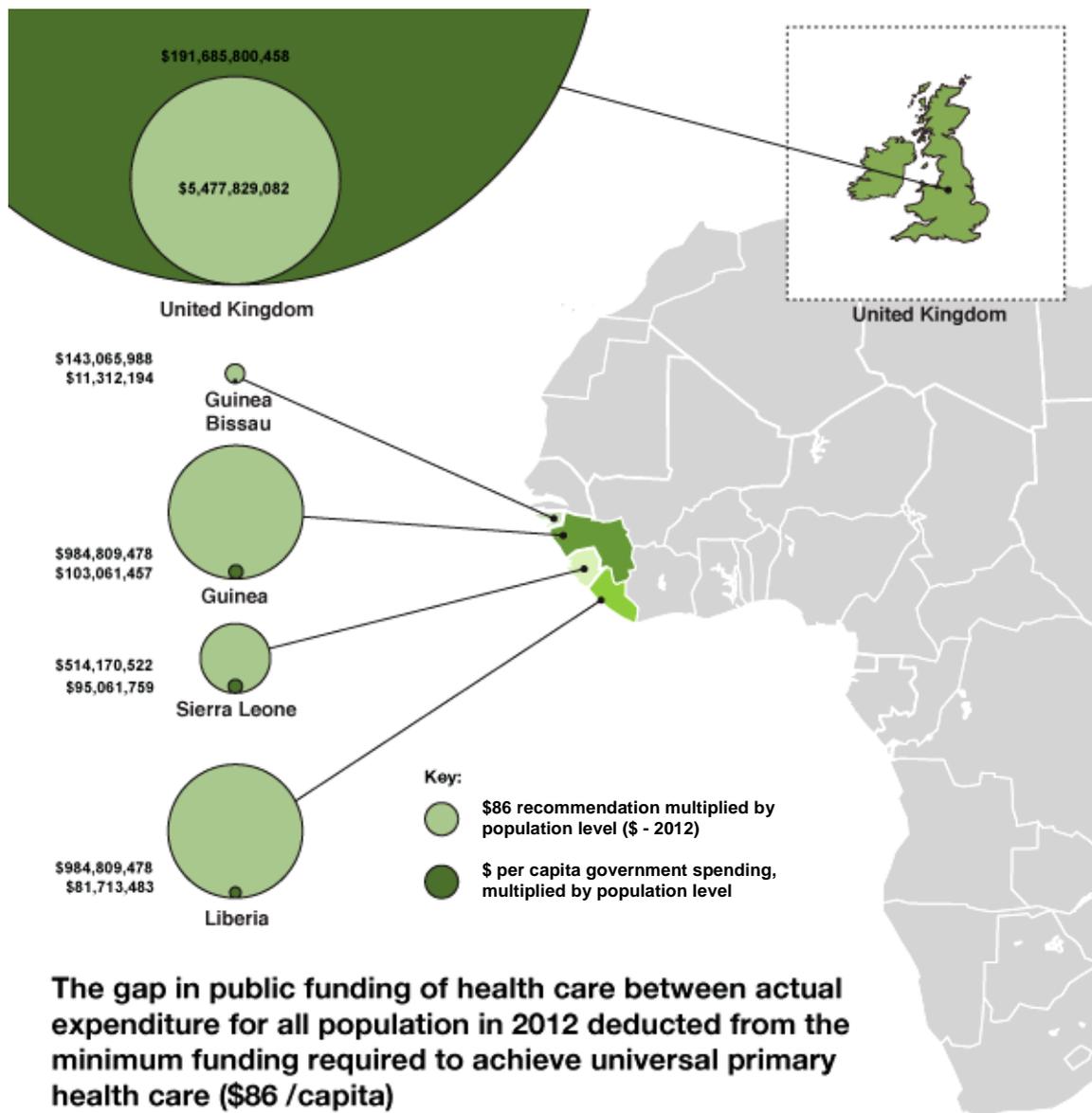
**Adequate financing:** Current levels of funding, although higher since the end of civil wars in Liberia and Sierra Leone, are still insufficient. Based on a figure of \$86 per capita – the latest estimate of the minimum funding needed to provide universal primary healthcare<sup>11</sup> – Oxfam has estimated the total funding gap by country (see Figure 2 on the next page).

Assuming that for each country the level of funding given to healthcare remains the same as it was in 2012, the annual funding gap that must be covered in order to achieve universal primary healthcare is approximately \$419m for Sierra Leone, \$279m for Liberia, \$882m for Guinea and \$132m for Guinea-Bissau. Although the gap seems large, it is feasible to fund it via tax revenues, supported by contributions from donors. Tax financing is the most equitable and sustainable system for raising and distributing funding for healthcare. User fees, on the other hand, are recognized as ‘the most inequitable method for financing healthcare services’ and one that ‘punishes the poor’.<sup>12</sup> Given the negative impact of Ebola on household economies, especially female-headed households, if user fees are introduced it would be a regressive act that would drive more people into poverty.

**A strong public sector to deliver an equitable, quality service:** This is essential to providing universal health coverage (UHC) as the weak public sector in Ebola-affected countries demonstrated when it was unable to maintain normal health services, let alone deal with the outbreak. Private provision risks creating two tiered systems, where people living in poverty pay for dubious quality services like drug peddlers, while people who are wealthy can afford five-star hospitals.

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**Figure 2: Map of financial gap in Liberia, Sierra Leone, Guinea and Guinea-Bissau compared to the UK.**



Note: Calculation is based on public spending and population number in 2012 and estimated spending for the same population if per capita spending is raised to \$86/capita.

## Experience from other countries

Experience from previous Ebola outbreaks in other countries highlight a number of factors that can contribute to the control of the disease. These include effective health systems, rapid government action and community participation, the use of media to disseminate information and rapid coordinated international response. Demographic factors, such as the mobility of a population, can also increase the risk of spread of the disease. However, in-depth research is needed to understand the relative importance and combination of factors within specific contexts.

**Effective health systems:** In the outbreak in Uganda in 2000, health services acted quickly to set up effective surveillance, clinical case management systems and strict enforcement of infection control measures, as well as training of health workers.<sup>13</sup> The Democratic Republic of Congo (DRC) has developed expertise due to six previous Ebola outbreaks and was able to rapidly deploy a team of experts to control the 2014 outbreak.<sup>14</sup>

**Community participation and rapid national action:** In West Africa, a lack of community trust delayed reporting and thus control of the Ebola outbreak. Mistrust reached a terrible level in one case in southern Guinea, where villagers killed a group of health workers.<sup>15</sup> However, intensive work in communities has in some cases resulted in people changing centuries-old burial practices. In Nigeria, a rapid response by the authorities saw a quick redeployment of resources from the country's polio eradication campaign to control of Ebola.<sup>16</sup>

In previous outbreaks in Uganda and DRC, the authorities engaged with communities through traditional community groups and NGOs.<sup>17</sup>

**Using media:** Nigeria used mobile phone technology to disseminate messages during the Ebola crisis in West Africa, while the Ugandan Ministry of Health trained journalists to report safely on the disease. Both resulted in dissemination of valuable information to the population.<sup>18</sup>

**The demographics** of infected populations affect outcomes: Infections in remote rural areas, as in DRC and Uganda, decreased opportunities for contact.<sup>19</sup> However, people in remote areas do not have access to information or services, which makes contact tracing difficult. In West Africa, a highly mobile population has helped to spread the infection across countries.<sup>20</sup>

**Timely international response:** Quick, coordinated and efficient international support has been critical to national work for the containment of previous outbreaks.

## Conclusion and recommendations

It is time that decision makers recognize that resilient health systems are a global public good to which everyone should have access. These systems<sup>21</sup> provide universal coverage of health services that are free at the point of use and have the capacity to respond to potential outbreaks.

Free health services remove the financial barriers that hinder people who are living in poverty from accessing services. Investment in resilient health systems challenges traditional donor/recipient relations which usually focus on short-term programme funding rather than long-term comprehensive health service financing. Aid must be considered as a financial contribution that mutually benefits all populations. National health systems become part of a globally coherent vision for health, one in which local and international efforts are mutually reinforced through principles held in common: this is the vision that universal health coverage offers. As affected countries develop their recovery plans, both the countries and donors must take a long-term view to developing resilient health systems.

**Countries, especially those affected by the Ebola outbreak, need to:**

- Invest in comprehensive public health systems as a central part of national plans to achieve UHC and to ensure future outbreaks can be dealt with. Governments must develop long-term costed plans to build resilient health systems that can serve health needs and health security. These should include health worker training and retention, including of CHWs; access to medicines and health technologies; HIS, including surveillance; and infrastructure, including water and sanitation;
- Progressively increase public resources in order to fill the annual health financing gap. Use progressive tax systems to finance resilient health systems in order to provide effective, efficient and equitable services free at the point of use;
- Foster trust amongst communities by ensuring participation in decision making and integration of the CHWs and volunteers that were trained during the Ebola outbreak into the health workforce.

**Donors and international agencies should:**

- Support governments' plans for post-Ebola recovery through building resilient health systems as a global public good that extends universal health coverage, free at the point of use, and responds to outbreaks. Donors should rethink traditional donor/recipient relationships that in the past have skewed the provision of health services towards specific projects and policies, at the expense of comprehensive free health care;
- Commit to longer-term funding for health systems, making annual allocations for financing the development of health services over a 10 year period, providing that plans are well implemented;
- Support countries to introduce effective measures to enable them to raise domestic resources via fair taxation;
- Contribute to creating a global tax system that is based on fairness and transparency.

**Governments and international health agencies should:**

- Endorse a R&D treaty which promotes public funding for R&D and is focused on the needs of public health so as to provide vaccines, diagnostics and medicines for diseases such as Ebola. Financing of R&D must be unlinked from the price of products that result from it;
- Enable civil society organizations to play their role in ensuring accountability and transparency by all stakeholders and in enabling communities to engage in decision making at the highest political levels, as well as in monitoring policies and financing for pro-poor health systems.

# NOTES

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