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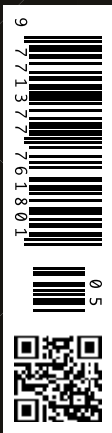
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Managed equipment services can be boon for emerging market health

Solving the waste issue of unused equipment in African hospitals

Managed Equipment Services (MES) is an innovative way of tackling the problem of wasted medical equipment stock in sub-Saharan Africa.



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In healthcare, the private sector is increasingly working with governments to address the needs of health systems. This collaboration can take many different forms, from simple public sector outsourcing of services to the private sector to more complex Public Private Partnerships (PPP) that can be used to build major health infrastructure, as has been done in Turkey for example. Public private collaborations can take many forms. An interesting model becoming more popular is Managed Equipment Services (MES), where manufacturers of medical equipment (private sector) bring 'total equipment solutions' to their clients.

With MES, the manufacturers don't just sell the equipment, they also agree to service it by concluding multi-year contracts that bind them to uphold service and performance standards and to train hospital staff to use and maintain the equipment. They may

also put in place an IT system that monitors how the equipment is being used which, over time, will result in better planning for equipment purchases. When constructed correctly, the MES company agrees to share the risk with their customer, the health service provider.

At present, manufacturers of medical equipment tend to come from advanced economies in Asia, Europe, and the United States. Given the high levels of R&D and capital expenditure involved in this line of business, they mostly are large, well-established companies. Global leaders, amongst others, include Philips (Netherlands), Siemens (Germany), General Electric (USA), Toshiba (Japan), Varian (USA), and Althea (UK). Increasingly we are seeing affordable equipment also being developed and sold by innovative companies from emerging markets such

as India (eg Esteem) and China (eg Mindray) that are competing both on price and quality.

Unfortunately, a lot of medical equipment in public hospitals in emerging markets sits idle—as much as 70 percent in sub-Saharan Africa, according to one WHO estimate—due to inappropriate procurement, lack of training on how to use the equipment, lack of maintenance, or failure to repair.

Imagine a scenario, for example, where a hospital, in a major upgrade of diagnostics equipment, spends about a million dollars on the newest, most hi-tech Magnetic Resonance Imaging (MRI) machine. After installing, the MRI works well...for about a month...at which point it breaks down. The hospital management then discovers that no staff member has the technical skills to repair it and/or the hospital lacks the proper spare parts to do so. They contact the manufacturer, which eventually agrees to dispatch a technician, who is usually based in a different country or continent, to inspect and make the necessary repairs.

“WITH MES, THE MANUFACTURERS DON’T JUST SELL EQUIPMENT, THEY ALSO AGREE TO SERVICE AND TRAIN HOSPITAL STAFF TO USE AND MAINTAIN IT”

The whole process takes a long time, and involves a lot of back-and-forth to confirm the terms and conditions of the repair job. For example, the spare part may need to be imported from afar. Meanwhile, no MRIs can be performed. Both provider and patient lose out in this scenario.

For developing economies, it may be more cost efficient to conclude MES contracts instead of making singular purchases. The MES procurement model offers the potential to have a positive impact in under-resourced settings. For example, MES can lead to better planning through a heightened focus on ordering equipment that meets a population’s actual healthcare needs and ensuring there is an adequate supply of trained medical personnel to use the equipment. MES thus offers the potential to make cost savings by having agreed protocols for maintenance and repairs.

In emerging markets, Kenya is an interesting test case for MES worth watching. As part of Kenya’s

comprehensive overhaul of its public healthcare system, the government contracted with GE Healthcare (radiology), Philips (ICU), Mindray (theatre equipment), Esteem (surgical theatre central services), and Bellco (dialysis) to modernise hospital equipment, including in intensive care, renal, and radiology units. The overhaul encompassed 98 public facilities spread across Kenya’s 47 counties. To eliminate the costs that middlemen sales agents can add, the government contracted directly with the original manufacturers of the equipment both to supply the equipment and for servicing and training requirements.

IFC, the arm of the World Bank that advises and invests in the private sectors of emerging markets, has a \$2.1 billion active portfolio in healthcare, a mix of debt and equity dispersed through more than 100 projects around the world. In all this work we take a health systems perspective and strive to support projects that maximise outcomes while minimising costs for the system. We believe that when planned correctly, MES can be an effective method to deliver high quality, cutting-edge equipment to emerging market hospitals in a more cost-efficient way.

As with most such private sector solutions in healthcare, the real challenge is integrating them with what is a much more complex overall health system of people, processes, and information. This requires a strong planning and oversight function. As demand for healthcare in emerging markets grows rapidly, MES will be part of the menu of private sector solutions available to governments that, hopefully, will raise the bar in terms of the quality, affordability, and accessibility of healthcare. ■

KEY POINTS

- ✓ In healthcare, the private and public sectors are increasingly working together.
- ✓ In the MES model, manufacturers of medical equipment provide total equipment solutions to their clients
- ✓ Up to 70 percent of hospital equipment in sub-Saharan Africa stands idle
- ✓ For developing economies MES contracts are more cost efficient than single purchases
- ✓ MES can be an effective, cost-efficient method of delivering high-quality, cutting-edge equipment to emerging markets



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