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E-Procurement of Medical Laboratory Equipment: Experiences from a Tertiary Care Oncology Center in India

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Dear Sir,

Patient outcomes and healthcare delivery are directly linked to the availability of calibrated, well-functioning, and quality laboratory medical equipment.[1] Quality assurance in medical laboratory is also directly dependent upon the equipment.[2] In low- and middle-income countries (LMIC), indiscriminate procurement methods among others are responsible for nonfunctioning of 40 to 70% of the medical equipment.[3] Public procurement amounts to almost 20% of the gross domestic production of India.[4] The Government e Marketplace (GeM) is an online public procurement platform launched in the year 2016 by Government of India with an aim to create a transparent procurement portal for government organizations.[5] GeM has various advantages including (i) ease of purchase, (ii) transparency, and (iii) time bound delivery of goods. However, procurement of medical devices and equipment is a critical issue and has its own challenges.[6] Our hospital is an upcoming government tertiary care oncology center with dedicated departments of oncopathology, transfusion medicine, transplant immunology, and microbiology. All the departments are being equipped with advanced state-of-the art medical equipment. We wish to share the issues identified and their possible solutions based on the experiences of e-procurement of medical laboratory equipment through GeM for our hospital.

Issue 1: Quality Assurance

The equipment upon delivery to the hospital were jointly inspected by the biomedical engineering department and the end-user department. It was observed that many a times, the technical specifications of the equipment upon physical verification were not matching the technical specifications of the equipment as declared on GeM portal. Moreover, it was also observed that, in many cases, the equipment were not Conformite Europeenne/United States Food and Drug Administration/ International Organization for Standardization certified, whereas on GeM the vendor had declared these certifications. Thus, these equipment had to be rejected, which led to delay in the procurement process. The results are similar to study findings by Mehra et al in which a discrepancy of specifications resulted in delay or cancellation of the procurement process.[7]

Solution: A specialized department dealing with medical and surgical items should be created in the GeM handling government body. The department should have personnel with biomedical engineering and medical background. It has been demonstrated that biomedical engineering can play a very important role in quality assurance of healthcare technology in LMIC.[8] The specialized department shall scrutinize the documents and certifications of vendors, before enlisting

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them on GeM portal. The sellers/vendors should understand that the quality of medical equipment directly affects the patient healthcare delivery and therefore they have an ethical responsibility to deliver quality healthcare equipment as declared on the GeM.

Issue 2: Servicing/Repair of the Equipment

The downtime of the medical equipment is a critical factor in effective healthcare delivery and must be kept at minimum.[9] It was observed that the medical equipment on GeM only come with a time bound warranty. Sometimes, the seller is located far from user location. Hence, effectively the onus is on the end-user to minimize the downtime in case of any equipment breakdown.

Solution: A clause to minimize downtime in case of equipment breakdown should be available for medical equipment.

To conclude, GeM is an effective and transparent tool for public procurement. However, as far as procurement process of medical equipment is concerned, various improvements need to be done in the GeM portal for streamlining of the procurement process.

Conflicts of Interest

None declared.

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