Studying the acceptability of an automated pneumonia diagnostic device in Ethiopia

In 2016 30,733 children under five died of pneumonia in Ethiopia*


To help health extension workers (HEWs) diagnose pneumonia Malaria Consortium trialled the children’s respiration monitor (ChARM) device in three districts in Ethiopia.

From May to August 2018:

528 sick under-fives were assessed with the ChARM device

132 HEWs were observed twice in 69 health posts

Our study found that...

74.2 percent of the time, HEWs correctly adhered to all eight steps of existing iCCM guidelines.

98.8 percent of the time, HEWs classified the child’s illness correctly.

99.1 percent of the time, HEWs made the right decision to treat the child.

HEWs felt that the availability of the ChARM device had encouraged caregivers to visit health posts.

HEWs were relieved that the device was found to provide a consistent reading when they tested it against their standard device.

Further studies are required to understand performance, cost effectiveness and other evidence gaps for automated respiratory rate counters.