Case Study: AI in Medical Diagnostics

The remote village of Mazpisāni (population 2,000) in a rural location has a small medical clinic run by Dr. Anna Singh. Recently, the clinic started using an AI diagnostic support tool called Medic-Searcher to help identify illnesses and make treatment recommendations. The tool was donated through a non-profit health organization.

So far, Medic-Searcher has helped Dr. Singh efficiently diagnose over 200 cases this year alone. However, this week a crisis hit when 10-year-old Joma Nuki came in with severe abdominal pain. Medic-Searcher analyzed his symptoms and categorized it as "likely gastritis." Dr. Singh agreed and told Joma's mother to give him fluids, let him rest and take pain medication as needed.

Two days later Joma's pain was even worse. His parents walked for miles to take him to the nearest full hospital, where scans showed his appendix had ruptured. He required emergency surgery and a lengthy hospital stay to recover.

The Nuki family was devastated that the seriousness of Joma's condition was missed. Rumors circulated questioning the clinic's care, claiming the AI technology was unreliable. Several village elders convened community meetings to debate getting rid of Medic-Searcher given this egregious misdiagnosis. Parents now say they have lost trust in the AI system.

Dr. Singh insists the technology has greatly aided village healthcare overall. But regaining patient and community trust around Medic-Searcher presents a major challenge she must now resolve.

Questions
- What steps could you take to rebuild trust in the AI technology among the villagers?
- How can you communicate the benefits, while also working to fix the problems created?