**Critical Communications in Remote Areas using LEO Satellites**

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*Project related outputs*

A table of medical records

Description automatically generated with medium confidence

A table with numbers and symbols

Description automatically generated

The use of telemedicine for stroke care is shown in the first table. Over time, both patient results and the speed of healthcare delivery have gotten better. The NIHSS score shows that the seriousness of strokes has gone down. This may be because of earlier involvement made easier by technology and better ways for distant hospitals to recognise and treat strokes. The drop in major risk factors like high blood pressure and diabetes suggests better preventative care and ongoing tracking. This may be because people have more regular access to healthcare through online systems. The fact that hospital stays are getting shorter and IVT administration is going up shows that quick action made possible by remote talks works. Overall, this study shows that telemedicine not only sped up reaction times to strokes but also helped improve health management and results in rural hospitals, which don't always have access to specialised stroke care. The second table shows how telemedicine has been used to help people in Manaus who have cleft lip, cleft palate, hand deformities. The numbers show that telemedicine made it possible to check on patients from afar. Most of the patients were babies or young kids, and the focus was on diseases linked to clefts. The benefit of telemedicine can be seen in how medical procedures were prioritised based on how bad the situation was. This made sure that the most serious cases were planned for surgery, even though the area had some physical limits. Because telemedicine made arranging and prioritisation easier, all of the patients who needed surgery were able to get it. This shows how telemedicine helps people in rural places get access to skilled healthcare. Additionally, telemedicine made it easier to help patients of all ages, which made sure that difficult cases like older kids with cleft lip weren't missed.

To sum up, both tables show how telemedicine improves access to specialised care, but they do so in very different situations: emergency stroke care and planned corrected surgery. In both cases, telemedicine made it possible for experts to help quickly, but its effects were different depending on the medical needs. For stroke care, telemedicine allowed for quick, real-time choices that helped people get better faster and lowered their risk of dying. As a result, telemedicine is very helpful for planning and carrying out treatments for people with cleft lip and palate, especially in places where getting to experts would have taken too long or not been possible at all.