

Two Ways to Disappear

Distance and data loss in Balochistan's emergency care

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Introduction

Balochistan is Pakistan's largest province: 347,190 km² and about 15 million people. For emergencies that need definitive care, nearly all of them depend on one city, Quetta. Accessibility models exist for Pakistan,⁵ but they run on facility lists and population counts alone. We modelled travel time to emergency care a civilian can use, and asked what missing patient data hides.

Results

9.6 million people

62.9% of the province live more than two hours from a hospital with verified, openly accessible emergency care. 5.2 million are more than four hours away. Two hours of driving reaches just 6% of the province's land.

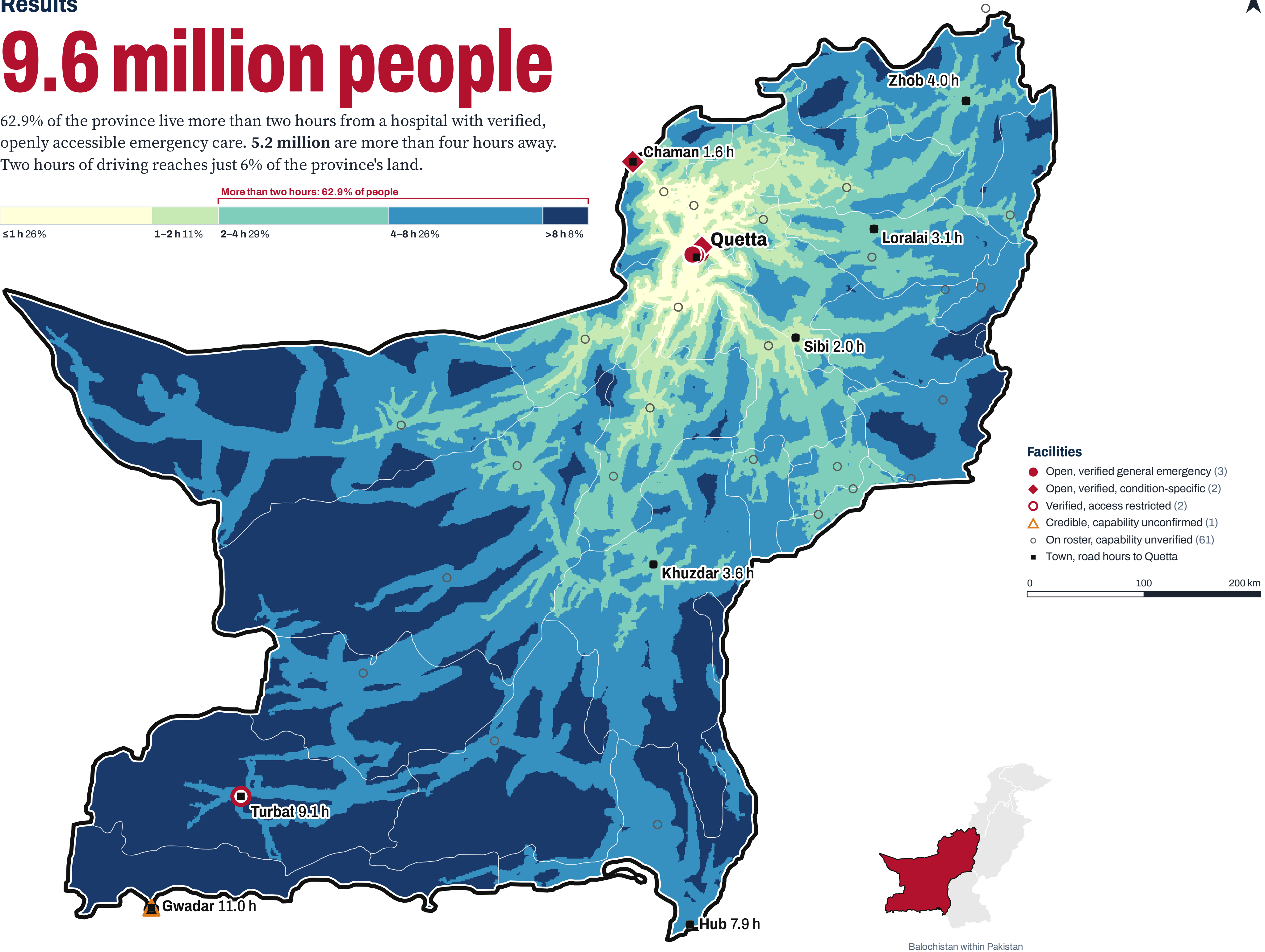
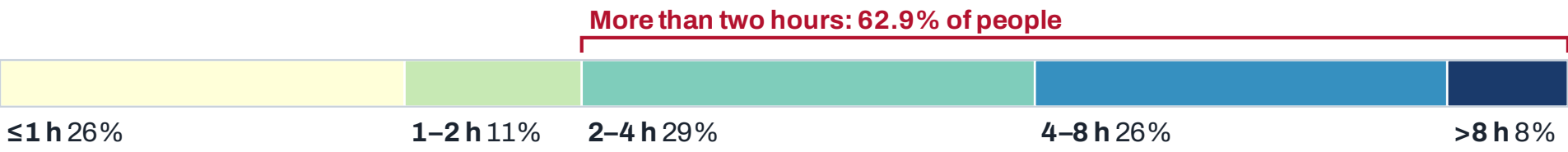


Figure. Modelled ground travel time to Balochistan's three verified, openly accessible 24/7 emergency hospitals, all in Quetta: Bolan Medical Complex, Sandeman Provincial, and the Shaheed Benazir Bhutto Trauma & Emergency Response Institute. Band shape follows terrain and roads. Town labels give free-flow road hours to Quetta (OSRM).

Distance is not the only barrier

Beyond those three, only two hospitals change the picture, and a civilian cannot walk into either. CMH Quetta sits inside the cantonment; FC Hospital Turbat, inside Frontier Corps headquarters. Counting them would bring 1.2 million more people within two hours. Adding cardiology, Chaman and GDA Gwadar on top barely moves the share beyond two hours, from 55.1% to 54.5%.

The second way to disappear

The map shows what distance does. It cannot show the patient who died on the road, because that patient left no record. The only quantified trauma series in the province comes from one hospital, CMH Quetta, 2012 to 2015, published twice;^{6,7} 79% of its mass-casualty patients were civilians.⁶ The one prehospital study times ambulance response for road crashes, not where patients started.⁸ A short referral record at arrival (origin, transit, outcome) would give this model the ground truth it lacks.

Where the record is lost



Limitations

Ground transport only; the air ambulance launched in May 2026 is not modelled. Capability rests on published evidence and clinician testimony, not site inspection. Free-flow times understate real transfers.

Conclusion

Nearly two in three people in Balochistan live more than two hours from emergency care they can use, and no one records who is lost on the way. Build capacity and referral capture together, so the next hospital goes where need has been measured.

References

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