

Sampling and participant flow

This study was conducted in four counties under a designated prefecture in Shaanxi province, Northwest China. A multi-stage random sampling method was employed. First, 40 townships were randomly selected from a pool of 59 townships, excluding urban townships in each county. The primary township health center (THC) in each selected township was included. Second, within each selected township, three villages were randomly chosen, and all village clinics (VCs) were incorporated, leading to a total of 148 VCs across 120 villages.

The study targeted primary health providers practicing Western medicine. In each selected THC, three providers were randomly chosen, while all providers from the VCs were included. In total, 120 providers from 40 THCs and 159 providers from 148 VCs participated, resulting in a sample of 279 primary health providers. Additionally, five households from each sample village were randomly selected, totaling 600 households.

The randomization process was stratified by the township level. After baseline data collection, 19 townships were randomly assigned to the telemedicine-based training group and the remaining 21 townships were assigned to a control group (See Figure 1). In the treatment group, 132 providers (57 from THCs and 75 from VCs) and 285 households were included. The control group consisted of 147 providers and 315 households.

A CONSORT diagram (Figure 1) illustrates the participant flow. Of the 279 providers, 209 (75%) were visited by standardized patients, completing 330 cases. Clinical vignettes were administered to 273 providers (98%), yielding 819 completed cases.

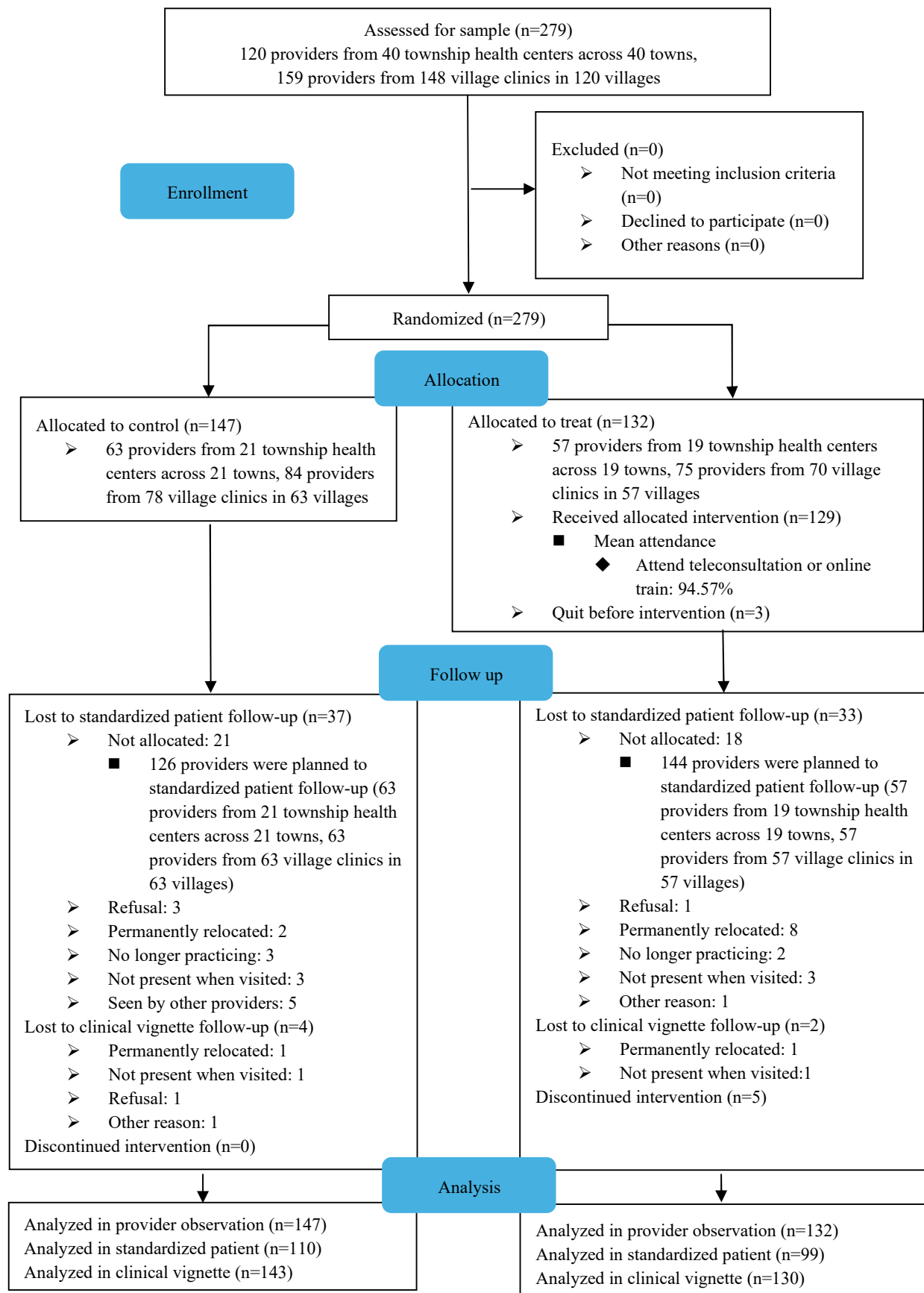


Fig 1 STROBE flowchart