Title: VoIP based tele-medicine call center-issues, challenges and proposed solution

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Abstract: In recent years, medical call centers have started using IP telephony services

to minimize the overhead telecom expenses. However, the advent of Voice-Over-IP (VoIP) technology has also created a major discontinuity in telecommunication sector due to illegal VoIP or gray calls, causing a great impact on the voice market. This brought few challenges to the countries' regulatory bodies. In this paper, we spell out one of the key challenges: in order to mitigate illegal VoIP calls, whether the regulatory body should allow IP telephony to be practiced for both domestic and international voice driven tele-medical consultation center operation combined or separately. We propose architecture and schemes for a medical call center. We also propose some guidelines and/or policies for both call center operator and the telecom regulatory authority. The proposed architecture and schemes are implemented in a pilot project basis in two phases and the test bed result is presented in this

article.