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## APPLICATION OF TELEMEDICINE IN UNCONVENTIONAL AREAS IN INDIA : CASE STUDY OF KARNATAKA PRISONS TELEMEDICINE PROJECTIN PPP MODE

## Abstract

Telemedicine (TM) Technology and formal service initiated by Indian Space Agency (ISRO) have been around for more than a decade in India. The basic concept of TM revolves around the theme of providing clinical services for patients at remote locations by connecting their primary doctors with specialists at other end.

TM in India has been in vogue connecting distant and geographically isolated locations such as the country borders and states of Jammu and Kashmir, North Easter region and the island states. As other modes of economic connectivity came into availability over the period, ISRO phased out Satellite connectivity, encouraged those modes and operators to take the market place for expansion wherever applicable. Providing necessary healthcare to the inmates including specialty treatment is an obligation of the prisons but are fraught with security risks and time taking efforts in carrying the prisoners to/from those hospitals. Learning a cue from TM in other fields, some Indian states like Karnataka, Kerala and Maharashtra initiated prison TM networks.

This paper presents the case study of the Karnataka Prisons Telemedicine Project taken up in Public Private Partnership (PPP) mode and analyses the strengths, limitations and scope for expansion for other prisons in the state and other states of India.

The project is conceived for two central prisons at Bangalore and Belgaum cities, connected to six specialty centres, five in Bangalore and one in Belgaum. Karnataka State Wide Area Network (KSWAN) provides broadband connectivity. A Memorandum of Understanding (MOU) entered between a Public sector agencies Karnataka Prisons and Karnataka State Electronics Developments Corporation Ltd (KEONICS) defining scope of the project as well as the roles and responsibilities of the parties. The project is implemented by KEONICS and installation, operations are by selected Private Agency, encompassing a call centre.

Since the project envisages personnel from Public and Private Organizations with different inherent priorities and guidelines; it is essential to define the operating and administrative structures as well for effective and hassle free operations.

The state project and specific issues related to it are highlighted in the presentation. The paper also brings out the factors and prerequisites for effective and efficient TM sessions and attempts to bring out Provider Satisfaction and Patient Outcomes associated with the application of TM in unconventional areas like prisons. The presentation explores the important aspects of implementation and may be useful for expanding PPP in TM which in-turn shall help in its rapid growth.