

## Identifying and describing a model region to evaluate the impact of telemedicine

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### Background:

Telemedicine solutions providing patient-centered care over distance need to be integrated into the regional setting. The acceptance by both providers and patients has to be continuously evaluated using methods of participatory implementation research. In controlled trials, often taking place in laboratory settings, these methods cannot be applied. In the following, research in progress is presented.

### Methods:

Based on socio-demographic data, epidemiology prevalence of age-related chronic diseases and data on the value of health care provision in Saxony, Germany a model region was chosen. Then, a focus group (n = 6) was conducted to differentiate the results and analyze the health networks of patients. For this, network maps putting the individual in the middle and his/her sources of information and support in case of illness in concentric circles around it, were used. The focus group was audiotaped, transcribed and analyzed by two researchers using MaxQDA.

### Results:

With a mean age of 47.8 years (n = 17,431), high prevalence of diabetes (>15.85 %) and hypertension (>39.1%) and an expected shortage of primary physicians in 2030, the town of Kamenz is a mirror image of the current health care challenges in rural areas of Saxony. Participants of the focus groups also stated problems in finding a primary physician or a dentist. Compensatory behavior, such as traveling large distances, relying on self-researched online diagnoses and immediately going to the emergency room for medical support was described. According to the network maps, primary sources of support in case of illness are partners and relatives, yet there is little connection between those and health care providers, as well as between different medical specialists.

### Conclusions:

The results will lead to potential use cases of telemedicine to be included into a standardized questionnaire for the assessment of telemedicine readiness in the model region.

### Key messages:

- Telemedicine implementation in a rural area can be studied using a participatory approach.
- Focus groups and network maps are useful qualitative methods for participatory research and can inform the design of quantitative measurements.