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Prevalence of infectious skin diseases in correctional facilities in Germany – Descriptive analysis of 656 teledermatological consultations

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in der Dermatologie

TELEMEDICAL SUPPORT FOR PRISONERS IN GERMANY

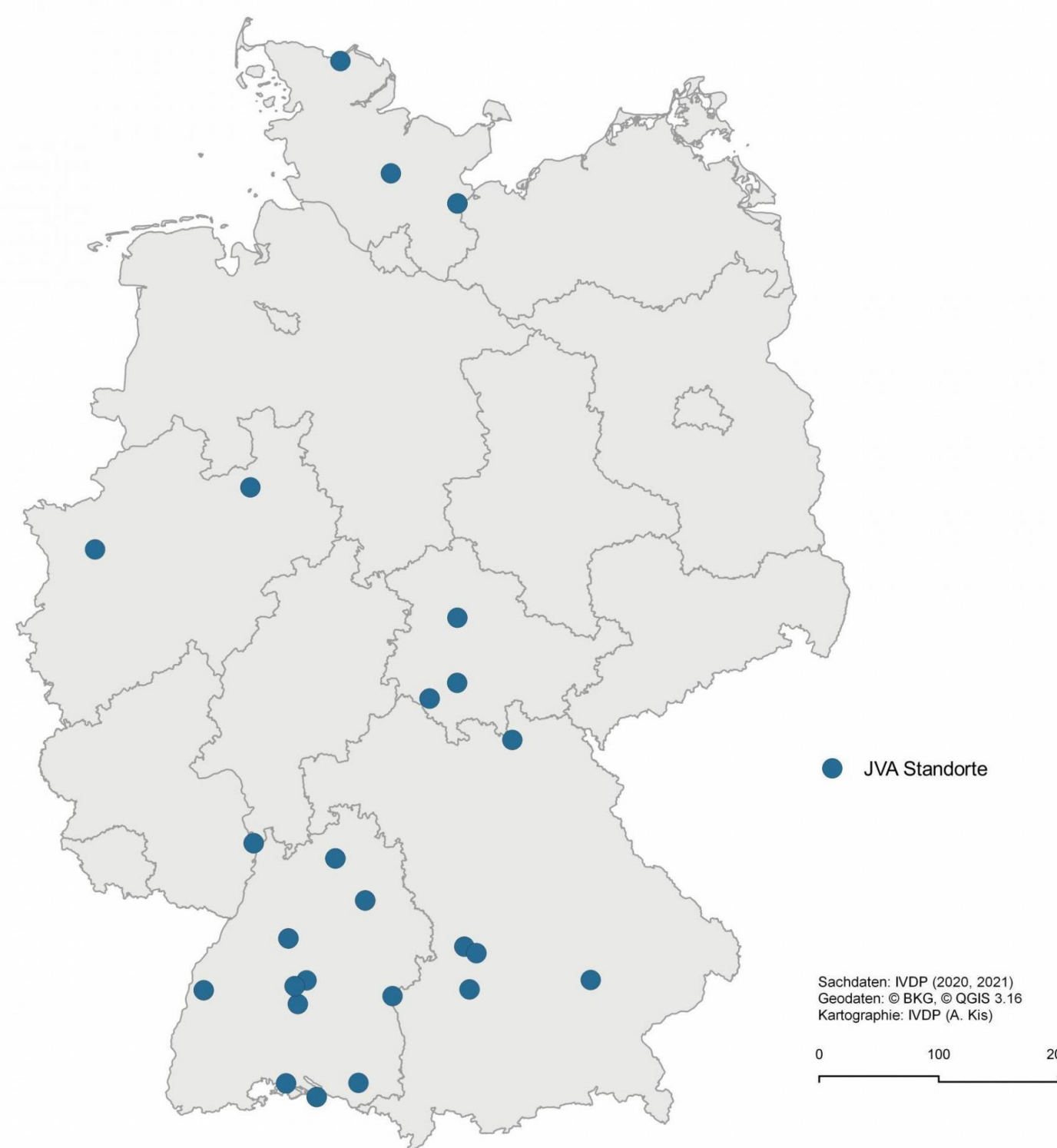


Fig. 1 German prisons requesting dermatological videosupport starting 2019

Advantages of telemedical care are

- timely use of medical expertise,
- bridging of spatial or organizational distances
- avoiding security risks and
- reducing contacts with possible contagious potential

Although German prisons provide a good medical care for prisoners the access to medical specializations is limited and resource-consuming. In 2018 the 121st German Medical Congress approved an amendment to the medical professional code of conduct (MBO-Ä) and enabled remote telemedical care*. Since 2019 our institute joins an interdisciplinary team for telemedical support of German prisons and contributes regular dermatological videoconsultations on a weekly basis.

MATERIAL AND METHODS

Descriptive analysis of n=656 teledermatological consultations from February 2020 till April 2023 with regard to infectious skin diseases.

WORKFLOW FOR TELECONSULTATIONS IN OUR PROJECT

All cases were requests for dermatological videoconsultation initiated by the treating primary care physician responsible for care of the individual in the respective prison. The medical staff of the prison sends the request through a qualified telemedical service provider using a standardized form with some anonymized information regarding onset, intensity and character of the skin problem. The system provides the opportunity to upload photos. The majority of cases (637 of 656; 97,1%) were performed during the regular weekly teleclinic and only a few cases (19 of 656; 2,9%) on urgent demand.

All cases were discussed during a live visit with a dermatologist and a general practitioner simultaneously and the management of the skin disease was planned together with the medical service on site of the prison to ensure the practicability of therapeutic suggestions in this setting**.

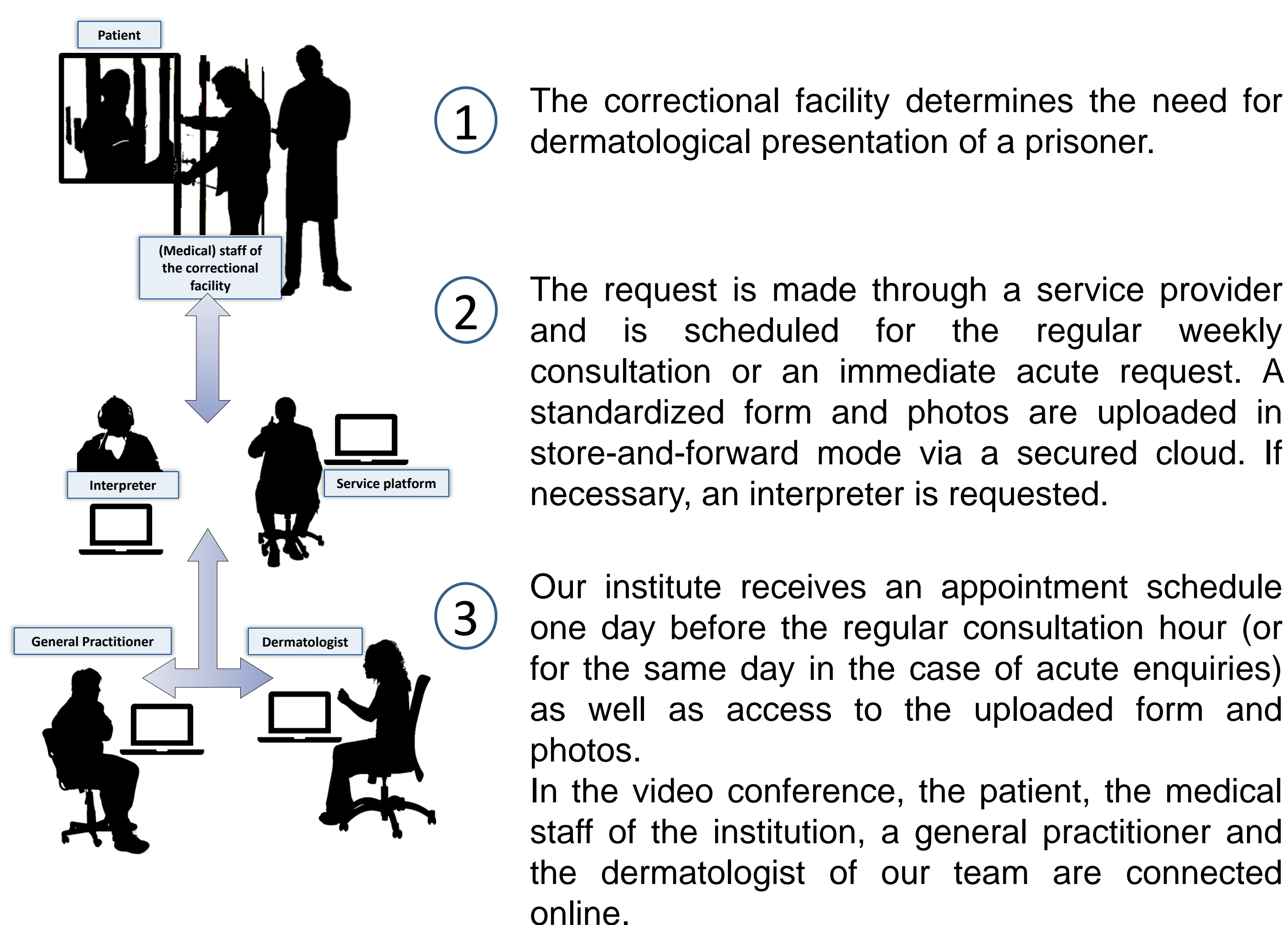


Fig. 2 Workflow for the interdisciplinary teleconsultations

CHARACTERIZATION OF REQUESTS FOR DERMATOLOGICAL TELECONSULTATION

96,2 % of the patients were male and the mean age was 33,5 (range 15 to 82). In 8,8 % of the cases (58 of 656) the requesting prison indicated a possible infectious disease, about one third (19 of 58; 32,8%) of them were confirmed by our videoconsultation.

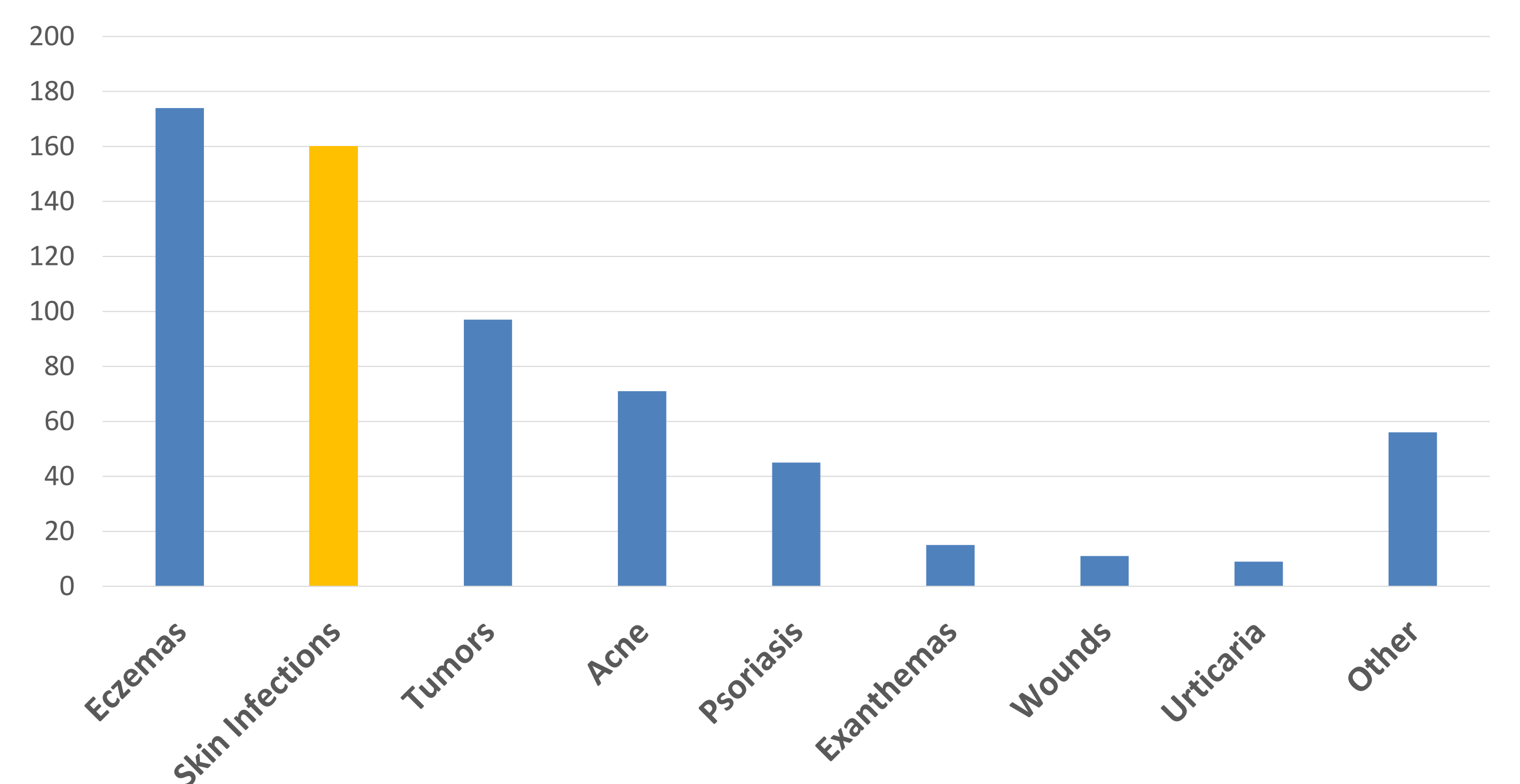


Fig. 3 Spectrum of identified skin diseases in n=656 requests from 2020 -2023

160 of the 656 cases (24,4%) received a diagnosis for skin infection from our dermatologists: 29 of the 160 cases (18,1%) had scabies, 76 (47,5 %) a fungal skin infection, 28 (17,5 %) a viral skin infection and 27 (16,9%) a bacterial skin infection.

23 of 160 cases (14,4%) needed further diagnostic workup. The majority of cases required topical treatment (134 of 160; 83,8%), 56,0 % needed additional systemic therapy (75 of 134). In 16,3% (26 of 160) we provided further managing recommendations like hygiene, isolation or occupational restrictions.

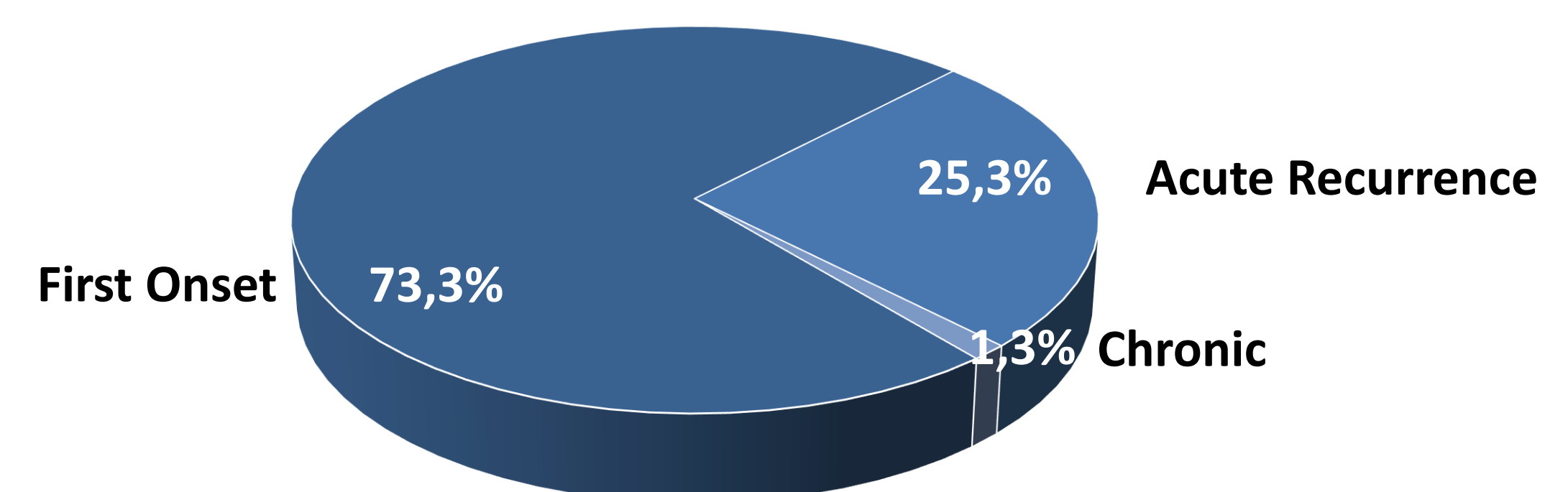


Fig. 4 Onset of infectious skin disease at the time of request

150 of the 160 cases gave information about the duration of symptoms with 73,3% (110 of 150) indicating an acute onset of the infectious skin disease, 25,3% (n=38) indicating acute recurrence of a previously diagnosed skin infection, and only 1,3% (n=2) indicated chronic existence of the skin disease.

EFFICACY OF THE INTERDISCIPLINARY TELEVISITS

The teledermatological requests were related to a wide spectrum of skin infections with a varying degree for contagious potential. In almost all cases the medical service on site could take the further treatment and monitoring of the skin disease over and 92,5% were finalized with a single consultation, only some cases (n=12; 7,5%) needed a second consultation in the observed period. Only single patients required further medical facilities outside the prison and therefore a transport to external medical institutions, e.g. for biopsy or surgery.

CONCLUSION

Teledermatological consultations offer the advantage of rapid diagnosis and care. In cases of infectious diseases a timely start of therapy and management is crucial to avoid spread to the inhouse population and to support the available medical facilities of the correctional facilities. The interdisciplinary approach accelerates rapid start of effective therapies and comprehensive follow-up of the cases by the general practitioner involved.

We experienced a high need of dermatological care for patients in detention to detect infectious or potentially contagious skin diseases. The predominant number of cases asked for a dermatological diagnosis and had a need for topical or systemic treatment. Teledermatological videoconsultation represents a very effective and resource-saving way of bringing specialized care to patients in situations with limited access to medical facilities.

*) 10. Mai 2018 - 121. Deutscher Ärztetag in Erfurt, Novellierung des § 7 Abs. 4 Musterberufsordnung-Ärzte (MBO-Ä). (Beschluss II-35; Entschließungen II-07; II-23; II-29; II-33)

**) Stephan B, Girbig G, Augustin M, Blozik E, Scherer M, Kirsten N, Otten M. The Value of Hybrid Teledermatology in German Prisons: Analysis of Routine Telemedical Data. *Telem J E Health*. 2023 Mar 16. doi: 10.1089/tmj.2022.0467. Epub ahead of print. PMID: 36927064