REMOTE ADMINISTRATION GUIDELINES: POSITIVE AND NEGATIVE SYNDROME SCALE (PANSS)

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The COVID19 crisis has resulted in many patients and raters being unable to perform routine in-person assessments. Multiple queries have come to scale authors regarding the validity and feasibility of remote assessment during this time.

The PANSS™ is a complex instrument that was validated on the basis of multiple sources of information, including verbal and non-verbal data gathered from a patient during a 30-40 minute interview and input from an informant who is familiar with the patient's symptoms and behavior over the past week.[1,2]

These recommendations below constitute our best effort to help guide investigators and clinicians using the PANSS during this difficult time. Please use your clinical judgment in all cases and consider each PANSS item separately, including the item definition, the basis for ratings, and the anchoring points.

TELEPHONE ASSESSMENTS OF PANSS ITEMS

A limited number of items on the PANSS may be assessed by telephone, e.g. G9 is evaluated based solely on the thought content expressed during the interview. However, certain items such as P3, P4, N1, N3, G4, G5, G7 and others explicitly define physical, behavioral and other non-verbal (visual) elements in either the item definitions, bases for ratings, or anchoring points. **In the event that no other modality is possible and ratings must be conducted by telephone, in addition to a thorough interview adhering to the structure of the SCI-PANSS, we advise a very thorough discussion take place with an informant who has immediate access to the patient and can help visually confirm the presence, absence, and severity of applicable behaviors, movements and other symptoms. The Informant Questionnaire for the PANSS (IQ-PANSS) may be used to help address and document some of these issues. Additional clarification questions can also be asked of the patient for certain items such as G4 (e.g., "during the interview have you found it hard to sit still"). The routine use of telephone as a modality is NOT advisable and should only be used as a short-term measure while other tools are being put in place.**

REMOTE VIDEO EVALUATION OF PANSS ITEMS

Many PANSS raters may have limited experience conducting PANSS assessments remotely. Several efforts are being made to help support research sites and institutions in their ongoing work to remotely assess outpatients who are not able to come in-person for scheduled evaluations. Some literature on remote evaluation of PANSS items suggests that with high quality video connections this is a valid and useful alternative to in-person assessment. [3] However, some adjustments need to be made to help standardize the approach being used. Please bear the following in mind:

- Video connectivity should have good resolution (no lower than 640x480 if possible).
- High-bandwidth connections at both the patient and site-side may be required to reduce signal latency and prevent delays in response, thereby protecting research rapport.
- Field of view should encompass both the face and upper body of the patient if possible, to allow the interviewer to observe level of body language, movement, and non-verbal reactions.
- PANSS raters should be vigilant for the presence of unusual movements, rigid or awkward posture, repetitive or noncommunicative gestures, and similar symptoms throughout the interview.
- Access to an informant is still required to obtain all information necessary to rate PANSS items.

TRAINING AND PREPARATION OF SITE-BASED RATERS FOR REMOTE ADMINISTRATION

As soon as possible, additional training for site-based raters conducting remote evaluations should be conducted to help standardize the process. This should focus on approaches to management of remote clinical encounters, guidance on how to address any possible technical issues that occur during the assessment, and how to minimize the impact of disruptions on rapport and evaluation. [4] There should also be clear protocols in place to address adverse events and the report of danger to self or others.

ITEM-LEVEL GUIDANCE

ITEM	REQUIRES VIDEO FOR EVALUATION	RECOMMENDED MODIFICATIONS FOR REMOTE
P1	Recommended, not required	
P2	Recommended, not required	
P3	Yes	Attention should be given to potential verbal and non-verbal responses to hallucinatory experiences; if the patient appears to be reacting to someone or something other than the interviewer outside the field of view of the camera, additional questions should be asked of the patient.
P4	Yes	If conducted by video, careful evaluation of behavioral information gathered from an informant will be critical to accurate rating along with observations of motor activity during the patient interview.
P5	Recommended, not required	
P6	Recommended, not required	
P7	Yes	Interpersonal behavior, including non-verbal communication should be carefully observed.
N1	Yes	Before the interview begins, be certain that lighting and camera angle are sufficient to evaluate changes in facial expression and communicative gestures.
N2	Yes	As this item is based both on informant report and on information gathered during the interview, be sure to consider each source before determining the appropriate score. Be aware of any potential inconsistencies observed on camera, e.g. no report of impairments in ADLs/personal needs, but potential evidence of lack of hygiene or other neglect on camera.
N3	Yes	Technical difficulties or low bandwidth may make it challenging to evaluate this item remotely. Spending some time before the conduct of the interview engaged in "unstructured conversation" with the patient may be critical both to ensure that you have adequate bandwidth connections, and to help gauge rapport prior to the more structured components of a remote interview.
N4	N/A	This item is based solely on informant report.
N5	Not required	
N6	Not required	
N7	Not required	

ITEM-LEVEL GUIDANCE (cont.)

ITEM	REQUIRES VIDEO FOR EVALUATION	RECOMMENDED MODIFICATIONS FOR REMOTE
G1	Not required	
G2	Yes	Physical manifestations of anxiety may be subtle and may also require a field-of-view that extends beyond the patient's face. Be certain that the camera is appropriately angled and positioned so that some view of the body is possible and so that signs such as hand tremor and restlessness can be observed.
G3	Not required	
G4	Yes	After attestation to anxiety, careful evaluation of physical signs and symptoms will be critical to rating this item. As noted in G2, be certain that the patient's body is viewable during the remote evaluation.
G5	Yes	Be certain to have as complete a view of the patient's body as possible to rate this item accurately. If the view of the patient's body is only partial, potential movements or postures that are detected should prompt the interviewer to ask that the camera be moved such that the whole body is viewable.
G6	Not required	
G7	Yes	Be certain to have as complete a view of the patient's body as possible to rate this item accurately. If the view of the patient's body is only partial, if any slowness of movement or response latency is detected, it should prompt the interviewer to ask that the camera be moved such that the whole body is viewable.
G8	Not required	
G9	Not required	
G10	Not required	
G11	Yes	In order to fully evaluate attention and ensure that the patient is not being distracted by significant external disruption during a remote evaluation, begin the session by verifying that the patient is in at least a semi-private location and that there is no activity in the immediate vicinity that would reasonably be expected to disrupt the interview.
G12	Not required	
G13	Yes	At the higher levels of severity, particular attention should be paid to physical signs and symptoms; clarification at the outset of the interview that the video connection is adequate to gauge responsivity of the patient.
G14	Yes	Aggression in a remote evaluation may be directed at objects adjacent to the camera; if an apparent outburst or destructive act is observed, corroboration with a caregiver may be required to help properly interpret events and attribute them correctly.
G15	Yes	At the higher levels of severity, particular attention should be paid to physical signs and symptoms; clarification at the outset of the interview that the video connection is adequate to gauge responsivity of the patient.
G16	Not required	

PLEASE NOTE

All efforts should be made to comply with local and national regulations regarding protection of patient privacy, data privacy standards, and applicable laws regarding the use of telemedicine and related technologies. Please consult with the relevant agencies and authorities as needed.

For further information or specific questions regarding remote evaluation, please contact: info@panss.org

To purchase the PANSS, SCI-PANSS, IQ-PANSS or other components, please contact: Betty Mangos at betty.mangos@mhs.com

[1] Kay SR, Opler LA, Fiszbein A. The Positive and Negative Syndrome Scale (PANSS) for Schizophrenia. Schizophrenia Bulletin. 1987. Volume 13 (2); 261–276.https://doi.org/10.1093/schbul/13.2.261

[2] Kay SR, Opler LA, Fiszbein A. Positive and Negative Syndrome Scale (PANSS) Technical Manual; 2006. Toronto, Ontario: MultiHealth Systems, Inc.

[3] Kobak K, Opler MGA, and Engelhardt N. PANSS rater training using Internet and videoconference: Results from a pilot study. Schizophrenia Research. 2007, 92 (1–3); 63-67.

[4]Opler MGA, Yavorsky C, Daniel DG. Positive and Negative Syndrome Scale (PANSS) Training: Challenges, Solutions, and Future Directions. Innov Clin Neurosci. 2017.14(11-12):77-81.