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Assessing Communication and Situation Awareness in Medevac Operations

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ASSESSING COMMUNICATION & SITUATION AWARENESS IN MEDEVAC OPERATIONS

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Abstract:

This research seeks to assess the methodology of aeromedical operations and increase both pilot and medical crew Situation Awareness (SA) through communication. A survey approach taken by 100 experts, will be used to solicit feedback from Medevac (pilots and medical) crew, the Subject Matter Experts (SMEs) on their communication procedures. Based on the responses, the researcher will then design and create a new communication model that will be derived from a survey questionnaire.

Methodology:

The analysis of this topic comprises:

- Designing a survey, composed of questions relating Crew Resource Management (CRM), SA, teamwork, communication, power distance, as well as safety.

To medical crew: On a scale of 1-10, how important do you think that the exchange of patient's condition with the air crew will enhance *team situation awareness*?

To aircrew: On a scale of 1-10, how often do you share flight information, such as altitude, flight path, estimated time arrival, etc., with your fellow aircrew?

Examples of Survey questionnaires

To both: On a scale of 1-10, how often do you think power distance obstructs communication between the flight crew and medical crew? (1 = Never and 10 = always)

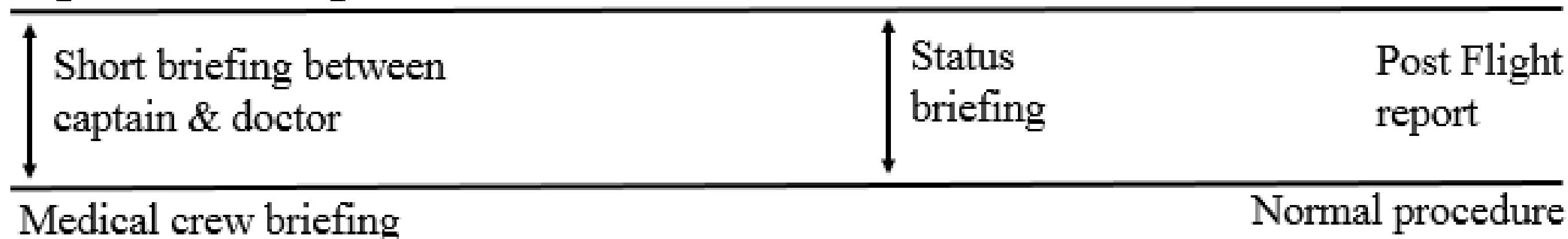


Team Situational Awareness (TSA) refers to "the degree to which team members possess the same Situation Awareness (SA) in shared SA requirement" (such as patient condition, decision altitude etc.) - Endsley, Jones, Schneirder, & McNeese, 2001.

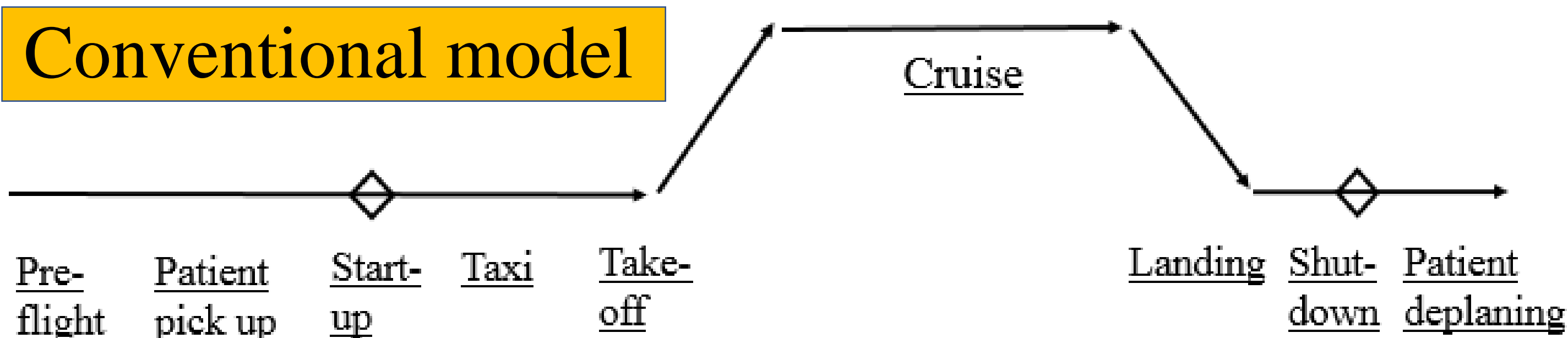
- Collecting feedback and responses from 100 experts in the field.
- Designing a new procedure for air-medical crews interaction.
- Suggest combined classroom training procedures for newly hired individuals and current practitioners and pilots along 2 days to guide both crews towards the new procedures of operation, based on the major components shown in the diagram.

Expected Results:

Fight crew briefing



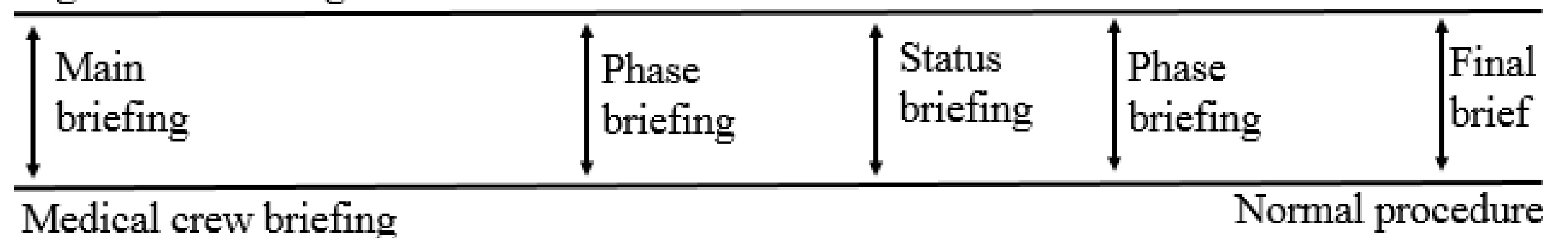
Conventional model



At the end of this research, it is also expected that the crew, who will take the training, will be willing to advocate that similar training should be introduced and applied in their respective organizations to improve the quality and safety of their operations.

It is expected that there will be a significant difference in participant's understanding of, and improvement of the participant's effective communication and teamwork skills.

Fight crew briefing



Proposed model

