Evaluating communication patterns in an international meeting: experience with the Community-Acquired Pneumonia Organization (CAPO) international research meeting

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Introduction
One of the most important values of international meetings is face-to-face communication among colleagues. The success of the meeting is based on level of interaction among participants. Using social network analysis, it is possible to objectively evaluate if a meeting fulfills the primary goal of two-way participation among most of the attendees.

Objective
The objective of this study was to evaluate communication patterns in an international meeting using social network analysis.

Methods
This was a prospective analysis performed during the CAPO international research meeting that took place during the 2015 American Thoracic Society meeting in Denver, CO. Social network analysis was used to evaluate: 1) general communication patterns, 2) network centrality indicating incoming communication, and 3) network centrality indicating outgoing communication.

Results
The communication patterns of 25 participants were evaluated. The three meeting chairmen as well as six other participants were consistently documented as central to the network based on in- and out-degree centrality measures.

Conclusions
Social network analysis allows for an objective evaluation of communication patterns during scientific meetings. Evaluation of these patterns can be used to improve subsequent meetings through participant selection, arrangement, and facilitation of the ultimate goal to enhance communication.