# Behavioral Health Care for Adolescents with Poorly Controlled Diabetes via Skype: Does Working Alliance Remain Intact?

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# Abstract

# Background:

Increasingly various technologies are being tested to deliver behavioral health care. Delivering services via videoconferencing shows promise. Given that the patient–provider relationship is a strong predictor of patient adherence to medical regimens, addressing relationship quality when services are not delivered face-to-face is critical. To that end, we compared the therapeutic alliance when behavioral health care was delivered to youth with poorly controlled type 1 diabetes mellitus (T1DM) and their caregivers in-clinic with the same services delivered via Internet-based videoconferencing (i.e., Skype<sup>TM</sup>).

#### Methods:

Seventy-one adolescents with poorly controlled T1DM (hemoglobin A1c  $\ge 9\%$ ) and one of their caregivers received up to 10 sessions of a family-based behavioral health intervention previously shown to improve adherence to diabetes regimens and family functioning; 32 were randomized to the Skype condition. Youth and caregivers completed the working alliance inventory (WAI), a 36-item measure of therapeutic alliance, at the end of treatment. Additionally, the number of behavioral health sessions completed was tracked.

# Results:

No significant differences in WAI scores were found for those receiving behavioral health care via Skype versus in-clinic. Youth WAI goal and total scores were significantly associated with the number of sessions completed for those in the clinic group.

# Conclusion:

Behavioral health can be delivered to youth with T1DM via Internet-based videoconferencing without significantly impacting the therapeutic relationship. Thus, for those adolescents with T1DM who require specialized behavioral health care that targets T1DM management, Internet-based teleconferencing represents a viable alternative to clinic-based care.

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Abbreviations: (BFST) behavioral family systems therapy, (BFST-D) behavioral family systems therapy for diabetes, (CBQ-20) conflict behavior questionnaire-20, (DRFC) diabetes responsibility and family conflict scale, (HbA1c) hemoglobin A1c, (T1DM) type 1 diabetes mellitus, (WAI) working alliance inventory

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