



# Metrics and Outcomes Report

## Issues of Adherence in Treating Individuals With Schizophrenia

*neuroscienceCME Snack*

*December 12, 2012 – December 12, 2013*

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## Report Executive Summary

**Clinicians overrated their pre-activity competence in managing schizophrenia and learned that they needed to both improve practices regarding medication adherence and optimize treatment with new strategies to prevent relapse within the first year and beyond.**

This neuroscienceCME Snack™ activity addressed gaps in patient care for psychotic disorders in the Chair Summit target audience, first by reinforcing education from the live meeting for Chair Summit participants and second by extending access to expert content from Chair Summit faculty to clinicians who had been unable to attend the meeting. Targeted participants—clinicians who affirmed that they see patients with schizophrenia—told CME Outfitters in the pre-activity survey that 39% of them **never** use office tools or assessment scales to help document treatment adherence, as well as their own and their patients' goals, in their patients with schizophrenia (sample, n = 100).

To address this gap, clinicians participating in this CME Snack learned approaches to help patients with schizophrenia adhere to antipsychotic medication regimens through (1) faculty insights into medication adherence, (2) practical approaches to improve patient–clinician dialogue, and (3) strategies to manage adherence in a community setting. Level 5 outcomes data reported here were gathered from clinicians (MD/DO/PA/NP) who provide direct patient care for patients with schizophrenia. Overall educational effectiveness, as documented by the findings below, is shown by this clinician's statement after participating: “[I] felt that this activity helped me understand my patients with schizophrenia and how to treat them.”

### Top Findings

To focus clinicians' attention on specific aspects of performance improvement (and supplement practice changes by clinicians who also participated in Chair Summit), this Snack activity specifically called for clinicians to commit to “discussing and monitoring adherence (during the next three months) in at least 40% more of [their] patients with schizophrenia who are prescribed antipsychotic medications.” Just after participating in the activity, commitments were lukewarm at 82.3% (n = 100), but over the course of the outcomes plan year, targeted clinicians with patients with schizophrenia outperformed their commitment, which we split into 2 parts:

- 71.4% of clinicians had *discussed* medication adherence with most to all (over 80%) of their patients with schizophrenia in the previous three months, and all of the others had done so with over 60% of these patients (n = 100).
- 71.4% of clinicians had *monitored* medication adherence with most to all (over 80%) of their patients with schizophrenia in the previous three months. The remaining 28.6% continued to need education with this measure, stating that they had monitored adherence with 0% – 20% of these patients (n = 100).

The context for this improvement is also important: upon registering for the activity, 74.0% of participating clinicians rated their competence in managing schizophrenia as high (or “7” to “10” on a 10-point Likert scale). With so much to gain in improving adherence in the near and long terms, clinicians had clearly overrated their competence in managing this major mental illness. In fact, in the final outcomes survey one year later, 71.4% rated their competence as high—a figure that is somewhat less than the 74.0% seen earlier—but a much larger *percentage* of this “high competence” group had lower self-ratings than before: while just 14.3% of clinicians chose “7” in the pre-activity survey (n = 77), 42.9% of clinicians chose “7” in the outcomes survey (n = 27). This shows that clinicians *knew* that they had overrated their pre-activity competence in managing schizophrenia, perhaps because they were not managing medication adherence optimally.

The most important information learned that participants offered immediately after participating is reflected in the Word Cloud of the 50 most frequent words and phrases that clinicians (MD/DO/PA/NP) shared as open-ended “most important information learned” responses related to the management of patients’ adherence to antipsychotic medication for schizophrenia, after they participated in the online neuroscienceCME Snack activity.



This word cloud immediately shows that changing the treatment plan to include long-acting injectable agents and including the family support structure in planning adherence strategies affected clinicians’ practice plans. When surveyed up to one year later, clinicians described various ways in which they had addressed poor adherence to antipsychotic medication in patients with schizophrenia (n = 30), for example:

- Thoroughly review side effects, actual compliance, environmental factors, as well as [provide] positive feedback in regard to adherence to treatment plan
- Monitor and take care of side effects
- Address inconsistency in care coordination
- Address poor illness insight, poor care
- Repeated appeals for adherence; patient education
- Changed medication; had patient work with a nutritionist; had patient join a gym

Positive feedback for patients demonstrating adherence and changing the treatment plan as needed to improve adherence illustrate improved practice behaviors among participating clinicians who treat patients with schizophrenia.

Knowledge test data tell us where and why clinicians knew they had room to improve practice behaviors to support medication adherence and better patient outcomes. They knew some reluctance of U.S. clinicians toward using long-acting injectable agents despite the Finnish experience of lower rehospitalization rates seen with use of these agents. They knew that family involvement in the early stages of schizophrenia affected patient outcomes. But in the activity post-test, they did not fully appreciate the typical rates of relapse after the first and second years since schizophrenia diagnosis:

- 23.7% of clinicians (n = 93) correctly identified relapse rates at *one year* as 30% of patients.
- 83.7% of clinicians (n = 92) correctly identified relapse rates at *two years* as 80% of patients.

The poor understanding of patients’ early relapse rates (during the first year) affects their willingness to support better medication adherence during the first year after diagnosis.

### Educational Activity Impact

Clinicians in the Chair Summit target audience had high to very high pre-activity competence self-ratings in managing schizophrenia, but by the time of outcomes measurement one year later, they knew that they had previously overrated their pre-activity competence, perhaps because they were not managing medication adherence optimally. They instituted better practices ranging from patient education and family support for adherence, to monitoring, documenting, and praising adherence, to using long-acting injectable agents and changing medication plans among patients with poor adherence histories.

Knowledge scores, competence ratings, and post-activity performance outcomes showed that clinicians recognized and used updated strategies for improving medication adherence to improve on patients' history of relapse in schizophrenia. Targeted clinicians developed strategies that considered system-, provider-, and patient–caregiver-related barriers to medication adherence, particularly in considering evidence for the greater treatment effectiveness of long-acting injectable agents. They also individualized multimodal, long-term treatment strategies by bringing in nonpharmacological, family-supported, and community-structured therapies, as shown in their practice-implementation methods up to one year after participating.

### **Informing Future Educational Needs**

On a third performance measure that was discussed in the content but *not* included in the immediate, post-activity commitment-to-change statement, data reveal an ongoing gap that requires future intervention. The new statement was to carry the first two to the next level: “Have you changed the treatment plan to improve adherence in patients with demonstrated poor adherence?” For this new measure, only 14.3% had changed the treatment plan to improve schizophrenia medication adherence for more than 60% of their patients—and some had done so for *no* patients (n = 30).

Because some treatments are more likely to improve adherence than others, this lack of attention to modifying the treatment plan shows clinically meaningful room for improvement. One in five respondents said that they needed more education on all three performance items. We also saw that too few clinicians in this learner population know the level of patient relapse during the first year, which affects their attitudes toward considering long-acting injectable agents to reduce rehospitalization rates. Because we know that targeted clinicians in this activity overrated their competence in managing schizophrenia, expert education is needed to continue to attract clinicians in the CME Outfitters learner population.

### **Voice of the Patient**

Early treatment to prevent relapse in schizophrenia is known to improve patient outcomes, and medication adherence to antipsychotic therapy with supportive multimodal, community, and family therapy can change the long-term patient outcomes. As this online webcast's related neuroscienceCME Snack will show, schizophrenia *recovery*, not just remission, is the new goal in psychosis care. When patients receive optimal care that includes updated strategies to support adherence, they have a better chance of avoiding rehospitalization, achieving recovery, and maintaining a better future after diagnosis of schizophrenia.

## Activity Information and Participant Demographics

**Activity Title:** Issues of Adherence in Treating Individuals With Schizophrenia

**Activity Target Audience:** Physicians, pharmacists, and other health care professionals who work with individuals with schizophrenia

**Activity Dates:** December 12, 2012 – December 12, 2013

**Faculty:** S. Charles Schulz, MD, and John Lauriello, MD

**Learning Objective:**

- Develop a strategy that considers systems, provider, and patient-caregiver barriers to medication adherence and integrates best practices, including family involvement, pharmacotherapy, and psychoeducation as part of an individualized, multimodal, long-term treatment strategy for persons with schizophrenia

**Attendance Information:**

	Estimated Attendance	Attendance
Enduring Activity Participation	2.000	2,003
Total Credit Requests	N/A	382

**Learner Demographics:**

	Responses (n)
Average years in practice	14.2 years (n = 382)
Average percentage of patients seen with schizophrenia per month	11-15 (n = 382)
Practice setting	Small-group practice (7%) Large-group practice (10%) Hospital (53%) Solo practice (22%) Managed Care (8%)

## Participant Evaluation Data and Feedback

The following information represents a compilation of data collected via all participant evaluations at the conclusion of the activity as well as data regarding learners' initial commitment-to-change (CTC) based on the content presented. CTC statements are designed based on activity learning objectives and impact the design of the six-week and six-month surveys.

Question	Percentage of Overall Learners	n Value
<b>The activity presentation met that stated learning objectives.</b> (Likert scale: 1 = strongly disagree to 5 = strongly agree)	100% (# responding 3-5)	182
<b>Do you feel the activity was balanced and objective?</b> (Yes/No response)	89% (# responding Yes)	182
<b>Do you feel the activity was free of commercial bias?</b> (Yes/No response)	89% (# responding Yes)	182
Commitment-to-Change Question	Percentage of Overall Learners	n Value
<b>Will you discuss and monitor adherence (during the next three months) in at least 40% more of your patients with schizophrenia who are prescribed antipsychotic medications?</b>	84% (# responding Yes)	182

### Sample of participant comments:

- Very useful presentation. I appreciated the patient-centric approach of the presenters.
- I felt that this activity helped me understand my patients with schizophrenia and how to treat them.
- I e-mailed link to other pharmacists as adherence is an issue in many chronic illnesses, as well as e-mailed to family members (support group).
- Great presentation!