


Motivational interviewing

▶ Intervention in brief

System wide:	Motivational interviewing is a patient-centered, collaborative communication style intended to strengthen a patient's motivation and commitment to behavior change. The goal is to drive engagement in their own care to achieve meaningful improvements in health outcomes.
Strength of evidence	 Medium Evidence is listed as medium despite the number of systematic reviews because impacts are mostly limited to behavior change without a clear tie to improvement in cost, utilization, and quality outcomes.
Impact	<ul style="list-style-type: none"> • Decreased cost: None • Decreased utilization: None • Improved quality, clinical outcomes: <ul style="list-style-type: none"> • Reduced weight (effect size d=0.47-0.51) • Improved medication adherence (17% higher likelihood of adherence, standard mean difference of 0.12-0.70, effect size d=0.19-0.72) • Decreased depression (standard mean difference of 0.18-0.34) • Reduced alcohol consumption (effect size d=0.18-0.43) • Increased smoking cessation (7-26% higher likelihood of cessation, 59.2-82.1% higher odds of cessation, effect size d=0.11-0.17) • Mixed impacts on feelings of anxiety (insignificant impact, 60.9% higher odds of reducing feelings of anxiety, 0.96-point increase on Hospital Anxiety and Depression Scale) • Insignificant impact to reduced BMI (standard mean difference of 0.72) • Insignificant impact to increased physical activity alone (effect size d=0.07) • Improvement in diet and exercise combined (effect size d=0.78) • Insignificant impact on dietary habits (alone), systolic and diastolic blood pressure, and lipid profile • Increased access: None • Improved stakeholder satisfaction: Improved quality of life (4.74-point increase on SF-36, improvement on 4/8 categories of the SF-36)
How to succeed	<p>To execute motivational interviewing effectively:</p> <ul style="list-style-type: none"> • Train staff at all levels to use the OARS method: ask open-ended questions, affirm the patient's statements, practice reflective listening to make the patient feel heard, and summarize key points from their conversation • Provide real-time feedback for clinical and non-clinical staff delivering motivational interviewing to ensure they uphold the core tenets of the practice • Prioritize face-to-face discussions for individuals with chronic conditions, as motivational interviewing interventions that are delivered solely face-to-face are more effective than those delivered solely by phone¹ • When using motivational interviewing to promote smoking cessation, prioritize single-sessions of motivational interviewing conducted by physicians, as data show that single sessions and physician-delivered motivational interviewing are more effective in achieving cessation than multiple sessions and sessions with other team members <p>To learn more about taking an evidence-based approach, check out our Motivational Interviewing 101 toolkit here and our Primer on Motivational Interviewing here.</p>

1) For smoking cessation, there is no significant difference between motivational interviewing delivered telephonically versus face-to-face.

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▶ Demonstrated impact

Literature review summary

Title: Effectiveness of Motivational Interviewing Interventions on Medication Adherence in Adults with Chronic Diseases: A Systematic Review and Meta-Analysis

Publication: International Journal of Epidemiology

Date: 2017

Type: Systematic review and meta-analysis

Study population: 4,221 adult patients (71% female, median mean age of 43 years) with chronic diseases participating in 19 studies

Major findings: Motivational interviewing increased medication adherence (standard mean difference of 0.12).

Source: Full article [here](#).

Title: Motivational Interviewing Improves Medication Adherence: A Systematic Review and Meta-Analysis

Publication: Journal of General Internal Medicine

Date: 2017

Type: Systematic review and meta-analysis

Study population: 2,529 adult patients (65% female with a median age of 43 years) participating in 17 predominantly U.S.-based studies

Major findings: Motivational interviewing had a positive effect on medication adherence (17% higher likelihood of adherence, standard mean difference of 0.70).

Source: Full article [here](#).

Title: Effectiveness of Motivational Interviewing on Lifestyle Modification and Health Outcomes of Clients at Risk or Diagnosed with Cardiovascular Diseases: A Systematic Review

Publication: International Journal of Nursing Studies

Date: 2016

Type: Systematic review

Study population: 4,684 patients at risk for or diagnosed with cardiovascular disease that participated in any of nine randomized controlled trials across the U.S., U.K., the Netherlands, Hong Kong, and China reviewed in 14 articles

Major findings: Motivational interviewing was associated with:

- Increased smoking cessation (75.6-82.1% higher odds of cessation)
- Decreased depression (standard mean difference of 0.18-0.34)
- Improved in quality of life (4.74-point increase on SF-36, improvement on four of eight categories of the SF-36)
- Mixed impacts on feelings of anxiety (insignificant impact, 60.9% higher odds of reducing feelings of anxiety, 0.96-point increase on Hospital Anxiety and Depression Scale)
- Insignificant impact on BMI, dietary habits (increased fruit and/or vegetable intake, decreased fat intake), physical activity, systolic and diastolic blood pressure, and lipid profile

Source: Full article [here](#).

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Title: Motivational Interviewing for Smoking Cessation

Publication: Cochrane Database of Systematic Reviews

Date: 2015

Type: Systematic review

Study population: 16,803 tobacco users participating in 28 predominantly U.S.-based studies

Major findings: Motivational interviewing was associated with a 26% increased likelihood of smoking cessation and an average quit rate of 17%.

Source: Full article [here](#).

Title: A Systematic Review of Motivational Interviewing in Healthcare: The Potential of Motivational Interviewing to Address the Lifestyle Factors Relevant to Multimorbidity

Publication: Journal of Comorbidity

Date: 2015

Type: Systematic review

Study population: Patients with chronic diseases that participated in studies reviewed in any of 12 meta-analyses from the U.S., UK, Canada, Denmark, Hong Kong, and China

Major findings: Motivational interviewing was associated with increased smoking cessation (27% higher likelihood of cessation, 59.2% higher odds of cessation, effect size $d=0.11-0.17$), improved weight management (effect size $d=0.47-0.51$), increased medication adherence (effect size $d=0.19-0.72$), decreased alcohol consumption (effect size $d=0.18-0.43$), and improvement related to diet and exercise (effect size $d=0.07-0.78$).

Source: Full article [here](#).

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Appendix

- Zomahoun HTV, et al., “Effectiveness of Motivational Interviewing Interventions on Medication Adherence in Adults with Chronic Diseases,” *International Journal of Epidemiology*, 46, no. 2 (2017): 589-602, <https://academic.oup.com/ije/article/46/2/589/2528222>.
- Palacio A, et al., “Motivational Interviewing Improves Medication Adherence,” *Journal of General Internal Medicine*, 31, no. 8 (2016): 929-940, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4945560/>.
- Lee WW, et al., “Effectiveness of Motivational Interviewing on Lifestyle Modification and Health Outcomes of Clients at Risk or Diagnosed with Cardiovascular Diseases,” *International Journal of Nursing Studies*, 53 (2016): 331-341, <https://www.sciencedirect.com/science/article/pii/S0020748915002953?via%3Dihub>.
- Lindson-Hawley N, et al., “Motivational Interviewing for Smoking Cessation,” *Cochrane Database of Systematic Reviews*, no. 3 (2015), <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD006936.pub3/full?highlightAbstract=withdrawn>.
- McKenzie KJ, et al., “A Systematic Review of Motivational Interviewing in Healthcare: The Potential of Motivational Interviewing to Address the Lifestyle Factors Relevant to Multimorbidity,” *Journal of Comorbidity*, 5 (2015): 162-174, <https://journals.sagepub.com/doi/10.15256/joc.2015.5.55>.