COLORADO
Office of Children, Youth & Families
Department of Human Services

Colorado Guidelines for Selecting Mental Health Therapies

Characteristics of effective therapy and warning signs of harmful mental health therapies

For clients in the care or custody of the Colorado Department of Human Services Office of Children Youth and Families and county departments of human services

Guidelines

Guidelines to outline principles of safe, effective therapies

Effective

Characteristics of effective therapy

Warning

Warning signs of ineffective or harmful therapy

Colorado Guidelines for Selecting Mental Health Therapies

Characteristics of effective therapy and warning signs of harmful mental health therapies

For clients in the care or custody of the
Colorado Department of Human Services Office of Children Youth and Families and county departments of human services

Corresponding Author: Jadon Webb, M.D., Ph.D.,
Acting Chief Medical Officer, Colorado Department of Human Services
Medical Director, Office of Children, Youth, and Families
Assistant Clinical Professor, Yale Child Study Center

Published
January 2, 2019

Table of Contents

Table of Contents 2

List of the reviewers and contributors of this publication 3

Executive Summary 6

Definitions 6

Characteristics of effective therapy 1

Warning signs of possibly ineffective or harmful therapy 6

Characteristics of potentially ineffective and/or harmful therapies 7

Conclusions and recommendations for Colorado providers 10

Appendix A - Levels of Evidence 11

List of the reviewers and contributors of this publication
(in alphabetical order)

Christine Andersen, MS, LPC
Director of Integrated Care, Beacon Health Options

Jordana Ash, LCSW, IMH-E (IV-C)
Early Childhood Mental Health Director, Office of Early Childhood, Colorado Department of Human Services

Christopher Bellonci, MD
Vice President of Policy and Practice, Chief Medical Officer, Judge Baker Children's Center

Colleen Bredell, LPC, ECMHS, IMH-E(III)
Private Practice

Amanda Brubaker
Project Specialist to the Chief Medical Officer, Colorado Department of Human Services

William M. Campbell, MD, FAAP
Associate Professor of Clinical Pediatrics Medical Director, Developmental Pediatrics, Children's Hospital Colorado

Shawn Carpenter
Training & Development Specialist, Division of Child Welfare, Colorado Department of Human Services

Sharon K. Devine MA, RN, NEA-BC
Director of Nursing Services/Chief Nursing Officer, Office of Community Access and Independence, Colorado Department of Human Services

Georgia C. Edson, LCSW
Director, Division for Regional Center Operations, Colorado Department of Human Services

Korey Elger M.S.W.
Ongoing Manager, Division of Child Welfare, Colorado Department of Human Services

Jane Flournoy, MA, LMFT, LPC, CAC III
Manager, Culturally Informed and Inclusive Programs, Office of Behavioral Health, Colorado Department of Human Services

Craig Foster, PhD
Professor, Department of Behavioral Sciences and Leadership, United States Air Force Academy

Patrick Fox, MD
Chief Medical Officer, Anthem Colorado

Carissa Fralin, MSW, LCSW
Program Implementation Manager, State Innovation Model (SIM) Office

Andrew Gabor, LPC
Director Child and Adolescent Services, and the CMHTA Liaisons, Office of Behavioral Health, Colorado Department of Human Services

Victoria Gallegos, Psy.D.
Chief Operations Officer, Colorado Mental Health Institute of Pueblo, Colorado Department of Human Services

Margie Grimsley
Federation of Families for Children's Mental Health, Colorado Chapter

Camille Harding, LPC
Division Director, Community Behavioral Health, Office of Behavioral Health, Colorado Department of Human Services

Allan Hutcheson, RN,CCHP
Nurse III, Medical Oversight Program, Office of Children, Youth and Families, Colorado Department of Human Services

Carly Knauf, M.A.
Doctoral Student, Clinical Psychology, Graduate School of Professional Psychology, University of Denver

Sandy Koves, RN,CCHP
Nurse III, Medical Oversight Program, Office of Children, Youth and Families, Colorado Department of Human Services

Dr. Michael Linden
Psychiatric and Psychosomatic Consultant, Charité University Medicine Berlin, Berlin, Germany

Charlie Lippolis, DO, MPH, FAPA
Child & Adolescent Psychiatrist, Colorado Medical Services Board, Task Force on the Collection and Security of Digital Images of Evidence of Child Abuse or Neglect (HB-1377)

W. David Lohr, MD
Chief Medical Officer, Department for Community Based Services, Kentucky Cabinet for Health and Family Services, Associate Professor of Child Psychiatry, University of Louisville School of Medicine

Anne Meier
Colorado State Long-Term Care Ombudsman, Disability Law Colorado

Jean Mercer, Ph.D.
Professor Emerita of Psychology, Stockton University

Kimberly Nordstrom, MD, JD
Associate Professor, University of Colorado Denver SOM, Medical Director, Behavioral Health, Colorado Access

Rai, Sasha MD
Director for Correctional Behavioral Health, Denver Sheriff's Department

David C. Rettew, MD
Associate Professor of Psychiatry and Pediatrics; Director, Child & Adolescent Psychiatry Fellowship, Director, Pediatric Psychiatry Clinic , University of Vermont College of Medicine

Linda Rosa, RN
Executive Director, Advocates for Children in Therapy

Ann M. Rosales, M.S.W.
Director, Division of Child Welfare, Colorado Department of Human Services

Heidi A. Sauder, PhD
Licensed Clinical Psychologist

Jason Seidel, Psy.D.
Director, The Colorado Center for Clinical Excellence

Colleen Stout, LCSW
Director of Quality Management, Office of Behavioral Health, CDHS

Dorothy Stubbe, M.D.
Associate Professor, Director, Child and Adolescent Psychiatry Fellowship; Medical Director, ACCESS-Mental Health Connecticut Yale Hub, Yale University School of Medicine Child Study Center

Aaron M. Termain, MPH, NHA
Division Director, Colorado Veterans Community Living Centers, Colorado Department of Human Services

Ashley Tunstall, MPA, MA, LPC
Director, Behavioral Health & Medical Services, Division of Youth Services, Colorado Department of Human Services; Adjunct Faculty, School of Public Affairs, University of Colorado Denver

Nita Mosby Tyler, PhD
Chief Catalyst, The Equity Project, LLC

Todd Webb
University of Denver

Blake Webb, M.D.
Chief Resident for Quality Improvement and Patient Safety, South Shore Psychiatry Residency Training Program, Harvard University

Amelia Wright
Health Professional II, Medical Oversight Program, Office of Children, Youth and Families, Colorado Department of Human Services

Judy Zerzan, MD, MPH
Chief Medical Officer/ Office Director, Client and Clinical Care Office, Colorado Department of Health Care Policy and Financing

Claudia Zundell Director
Workforce and Innovation, Office of Behavioral Health, Colorado Department of Human Services

Executive Summary

The Colorado Department of Human Services (CDHS) Office of Children Youth and Families (OCYF) supports health care practices that improve the well-being of our clients and minimize chances of adverse outcomes. This standard applies to psychotherapy and related talk or activity-based therapeutic interventions used to treat mental health or behavioral concerns.

It is in that spirit, that these first-ever Guidelines to outline principles of safe, effective therapies, as well as characteristics of ineffective or potentially harmful therapies were created. The goal embodied in this project is that our fellow Coloradans living with mental illnesses are cared for with competence by caring and well-informed professionals.

This document is a guide for mental health providers and administrators that serve clients of OCYF and local county departments of human Services. Clients, caregivers and interested citizens are also encouraged to access it freely.

We hope you will find this a valuable resource for ensuring best-practices in your organization.

Introduction

Thousands of Coloradans struggle with serious mental health challenges, and various talk and behavioral therapies are available to assist them. Many therapies are proven to be effective treatments, but others are ineffective, wasteful, and may even increase the risk of adverse outcomes.

Because of the variability in therapy effectiveness and safety, the OCYF has collaborated with a range of notable community stakeholders (see Reviewers list), to produce these best-practice Guidelines for providing therapy to clients in our state's care. This document is our way of taking a stand for high quality treatment, and helping protect clients from treatments that are harmful or ineffective. We hope stakeholders find it useful if interested in knowing what kinds of treatments we support being administered in our facilities and by our community practitioners.

Please note that we strongly support all credible forms of therapy, and are extremely grateful to the talented therapists that care for our state's most vulnerable citizens. This document should in no way suggest that therapy is not helpful in most cases (it is usually helpful), but rather, it should serve as general suggested guidelines for selecting the most beneficial therapy for a problem.

These Guidelines do not list the specific therapies we do or do not support, as emerging evidence can impact how effective a treatment is judged to be. Instead, this document lays out the principles we ask our facilities and providers to consider when choosing a specific treatment, for a specific client, at a specific time in their life.

Many people helped bring this document to completion. A complete list of contributors is found at the end of this document, and we thank them all for their valuable contributions.

Thank you for caring for the citizens of Colorado, and for joining us in ensuring that our clients consistently receive the best care possible!

Definitions

Therapy: For these Guidelines, we intend therapy to broadly mean all interventions that involve talking with the client and/or their caregivers (e.g. psychotherapy or counseling), or engaging in activities used to address behavioral/mental health concerns, such as music, art, dance, and exercise programs. Treatments described as "psychoeducation" are also included. These activities may or may not be formally considered billable services, depending on the reviewing provider or third-party payer.

Most research has centered around talk-based psychotherapies, and so "therapy" here will most often refer to talk-based intervention. But again, any non-medical activity directed at improving mental health or behavior will likely fall into the definition of therapy as used here. Note that medical diagnostics (imaging, labs), or medical interventions (medications, electroconvulsive therapy, transcranial magnetic stimulation, etc.) would not typically be described as therapy.

Mental Health and/or Behavioral Health Conditions: Included in this category are all conditions related to psychiatric/psychological disorders such as depression, anxiety, PTSD, bipolar disorder, schizophrenia, personality disorders, and also conditions that deal with maladaptive human behavior but may not have a formal psychiatric diagnosis (e.g., anger outbursts, bullying issues, undiagnosed conduct problems or other disruptive behaviors).

Characteristics of effective therapy

Every organization providing therapy services should regularly review their treatment offerings and ensure they are safe and effective, and exclude practices that are known to be ineffective or harmful and practices that lack a sensible basis in contemporary science. Below are characteristics of effective therapy modalities that we support for our clients.

It is evidence-based.

Some research shows that Evidence-Based Practices (EBPs) help clients more than those that are not evidence-based. It is important that our clients receive EBPs whenever possible.

Precisely defining what an EBP is can be difficult (Aarons, Sommerfeld & Walrath-Greene, 2009; Rycroft-Malone, Seers, Titchen, Harvey, Kitson & McCormack, 2004), but most reputable organizations generally agree that an EBP is empirically supported and based on scientific evidence free of bias (e.g., financial influence or undue treatment allegiance by the researchers).

Scientific evidence can be ranked according to its strength. Case reports and small observational studies are generally considered weak evidence, as is evidence not published in a peer-reviewed process. Randomized, controlled trials (RCTs) are studies that use well-described, established scientific methods to minimize bias and promote objective findings that are replicable, and are generally considered strong evidence. In cases where randomized trials are not possible, controlled clinical trials (CCTs) are the next best evidence; in these, the outcomes for people who have received the treatment are compared to outcomes for a similar group of people who received no treatment, or a different treatment, but chose their treatment rather than being assigned to one by researchers. In both cases, there is a way to compare what happens as a result of the treatment to what happens without it.

A meta-analysis or systematic review compiles the results of multiple controlled trials and is considered especially strong evidence.

Importantly, the Family First Prevention Services Act (H.R.-253, 2017-2018) also outlines another approach to levels of evidence in support of therapies, and it is very much worth considering. This is referenced in more detail in Appendix A (below), and it includes the categories of Promising Practice, Supported Practice, and Well-Supported Practice.

Usefulness of scientific evidence is also judged by how closely the study population accurately reflects the client the clinician wishes to treat. If a therapy was only tested in adults, for instance, those results may not generalize to young children.

Evaluating the strength of evidence for a therapy is a difficult, time consuming process far beyond the scope of most health care systems. Thankfully, several major evidence Clearinghouses (shown below) review the evidence for therapies and provide free, publicly available assessments of whether a treatment is evidence-based. Other kinds of organizations are devoted to helping practitioners and administrators understand and implement evidence based practices.

We highly suggest referencing these free Clearinghouses when deciding whether to endorse a particular kind of therapy:

- California Evidence-Based Clearinghouse for Child Welfare
- Effective Child Therapy Database
- Division 12 Database
- National Child Traumatic Stress Network
- Blueprints Database
- Social Programs That Work
- SAMHSA Evidence-Based Practices Resource Center

The OCYF applauds the practice of submitting therapies to these Clearinghouses for independent assessment of their evidence basis. A commitment to transparency and independent review is one hallmark of effective therapy and is consistent with our own ideals

It follows ethical standards set by the major mental health professional organizations.

All effective therapy modalities should operate consistent with the highest ethical standards set by major organizations representing licensed mental health practitioners.

Ethical standards from various major organizations are referenced here and serve as guides for principles of ethical, effective therapy:

American Psychiatric Association
American Psychological Association
American Academy of Child and Adolescent Psychiatry
National Association of Social Workers
American Counseling Association
American Association for Family and Marriage Therapy
American Music Therapy Association
American Art Therapy Association
United States Association for Body Psychotherapy
American Therapeutic Recreation Association
American Massage Therapy Association
National Association of Social Workers
North American Drama Therapy Association
American Dance Therapy Association

It offers real-world benefits.

The OCYF supports therapy modalities that improve the chances of real-world, positive life outcomes that are valued by clients and their families. Note that the ability of different therapies and therapists to impact these important, real-world outcomes has not been adequately measured in some settings. In those cases, clinicians must infer whether real-world benefits are likely for their client.

Effective therapy should improve outcomes of greatest importance to the clients and their families, rather than just improving the numbers on a clinical rating scale.

Examples of important client outcomes might include:
- completing school
- getting a job, or maintenance of employment
- staying out of the emergency room or hospital
- not re-entering the criminal justice system
- not harming self or others
- reducing illicit substance use
- fighting less with family
- placement stability for foster youth
- feeling more engaged in hobbies and pursuits of interest
- finding a satisfying meaning and purpose for one's life
- self-reported improved health and quality of life
- reduction of any high-risk behavior
- reduction of suicidal thoughts

For child clients:
- attending school, and not being disciplined
- improving school achievement
- making friends
- maintaining foster or adoptive family situation
- completing age-appropriate developmental milestones
- self-regulating at a developmentally appropriate level
- not bullying or being bullied

There is no evidence that the therapy is ineffective or harmful.

Some therapy modalities offer little or no benefits when studied, and may even increase chances of client deterioration. This is explored in more detail in the second half of this document regarding ineffective or harmful therapies.

Client health is measured early and often.

Behavioral health is a complex field, and it can be very difficult to know precisely what symptoms are being treated. For example, therapy that simply "talks about my issues" with no clear goals, for instance, is too vague to rigorously measure.

Research (e.g. Lambert 2003 and discussed by Sapyta 2005 and Kessler 2018 and Kilbourne et al. 2018) shows that measuring outcomes during therapy reduces the chances of bad outcomes, and often leads to better outcomes (see also this discussion by Jarrett).

Rating scales to measure therapy effectiveness and monitor for adverse events are also being developed and should be used whenever possible. All therapeutic modalities should be tied to the client's specific clinical presentation. Effective therapy should also formulate personalized, measurable goals for the treatment early in the process. A format along the lines of SMART Goals is a good potential approach.

Effective therapies should have clear and measurable treatment goals that are developed early, and monitored frequently. This ongoing assessment process is one of the most powerful ways to improve client outcomes and client engagement early in the process when clients are most at risk of early termination without receiving clinical benefit. It is a great way to decide whether the treatment should continue, be modified, or even terminated.

The therapy is chosen for client's benefit, not for staff or caregiver convenience or level of training.

The convenience of staff or caregivers should not be the primary consideration when determining the best therapy for clients. In the real world this can be complicated, as some caregivers may truly be unable to support a client's involvement in certain therapies due to transportation, scheduling, or financial constraints. Therapy may need to accommodate these unavoidable constraints but whenever possible, staff and caregiver convenience should not be the guiding force for choice of modality.

Therapy should also not be chosen based on what is most easily achieved by the treatment team, but based on what will benefit the client most.

It produces early improvements.

Research repeatedly shows that early improvements predict the long-term success of a treatment (e.g. Tadic 2017, Schlagert 2017, and a discussion by Walton 2010). This may be related to the instillation of hope, which is a common factor in positive treatment outcomes. With more initial improvement, and hope, clients are more likely to stay engaged in treatment long enough to experience benefits.

Therapists should strongly consider measuring progress early in treatment (e.g., in the first 4-6 sessions) to determine whether clear, measurable progress is being made. If process is not satisfactory, the team should consider changing the therapy approach, reconsider the accuracy of the diagnosis, or possibly change the providing therapist.

Allowing a client to continue in therapy without early results is likely to reduce the chances of benefit, and may even harm the client.

It considers its own opportunity cost.

Opportunity cost of a therapy is an important, but rarely addressed issue. Therapy often requires considerable time and resources, and therefore will displace other activities in a client's life that might also be beneficial. For example, a client engaged in intense, individual psychotherapy may no longer have the time to pursue a sports program, may spend less time with family, or may no longer have time to participate in another type of therapy such as a social skills group or family therapy.

A truly effective therapy, then, is one that is likely to yield desired changes in a client's life beyond any competing therapies or interventions it would displace, and beyond watchful waiting without treatment. This is a high standard to meet, but one we support as a true best-practice approach.

It achieves the best outcomes for the least cost.

Cost is an important consideration in all systems, but especially those with limited resources. An expensive therapy modality may strain the system and thus limit availability of other needed resources.

An effective therapy, therefore, achieves a desired clinical outcome for the least cost among available options with the same effectiveness.

Cost should be carefully considered by those deciding what treatments will be offered as there can be a tendency to choose modalities for reasons other than actual effectiveness (e.g., being more familiar with a certain modality). This can quickly cloud discussions around selecting the most cost-effective, helpful option, especially if the practitioners have helped develop or teach a modality under consideration.

Many EBP therapy modalities produce roughly similar clinical outcomes, and so any claim for superior outcomes should be thoroughly assessed for objective, supporting evidence that would justify increased cost.

Of note, the Washington State Institute for Public Policy maintains a website that considers the overall cost-effectiveness of some treatments, and may be useful when deciding what therapy modalities to offer (also see Kerns et al., n.d., EBT Cost Study).

It is administered at the right intensity.

The ideal length of a course of psychotherapy is being investigated. Currently, there is no formal consensus on the right treatment intensity and duration for many therapies (e.g., Andrade 2000; Bickman 2002; Peterson and Busch 2018).

That said, clinicians should use their clinical judgment and feedback from their clients in deciding on treatment intensity and duration. If a reasonable intensity or duration is not likely to be achievable, an alternate treatment with a more achievable schedule should be considered.

It is important to remember that a significant number of clients will require a maintenance of therapeutic effort to achieve a good clinical outcome at a sustained and "quality of life" supporting level. Interventions thus need to be considered at both an episodic and ongoing manner for best outcomes.

It is delivered by an effective, capable therapist.

The effectiveness of a therapy modality often depends in large part on the therapist delivering it. Decades of research indicate that the provision of therapy is an interpersonal process in which a main curative component is the nature of the therapeutic relationship. Effective therapeutic engagement in a positive, trusting therapeutic relationship has been shown to correlate more highly with client outcome than any particular specialized treatment intervention.

Therapists who practice person-centered, empathic treatment that is congruent with the hopes and desires of their clients are most likely to achieve to the best outcomes.

We strongly encourage all organizations treating our clients to assess patient satisfaction with their therapist and to adhere to recognized ethical guidelines.

Checklists of potentially concerning therapist behaviors have also been developed by several groups, including a useful, easy-to-read 50 item checklist.

Organizations should generally take proactive steps to monitor all clinical staff by ensuring that they are:

- ✓ Licensed (if applicable), and in good standing
- ✓ Compliant with the ethical guidelines and laws of their area of expertise
- ✓ Adequately trained and/or certified in what they practice, and engaged in continuing education
- ✓ Monitored regularly in clinical supervision and direct observation, and
- ✓ Monitored regularly through confidential client feedback and objective clinical outcome measures

Keeping close watch on performance feedback helps ensure a clinician can effectively serve a particular client population. It also helps spot signs of burnout and the emergence of concerning clinician behaviors.

The therapy is responsive to the client's culture.

An effective therapy should be able to adapt to a client's culture. In addition to this being respectful, cultural adaptation of therapy correlates with improved client outcomes. Clients having a choice in treatment modality (when several equivalent options are available) also tend to better improved outcomes. For these reasons, we strongly support therapy that is culturally sensitive, and that respects client choice whenever possible.

Note that OCYF defines "culture" as the "shared patterns of behaviors and interactions, cognitive constructs, and affective understanding learned through a process of socialization. These shared patterns identify the members of a culture group while also distinguishing those of another group. People within a culture usually interpret the meaning of symbols, artifacts, and behaviors in the same or similar ways. Culture includes, but is not limited to: race, ethnicity, religion, spirituality, gender, sexual orientation, language and disabilities."

It has normal side effects that are understood.

All treatments have the potential for side effects, even when delivered optimally. For instance, evidence-based trauma-focused therapies sometimes cause increased symptoms of anxiety early in the process, and family-based therapies focused on setting limits with a youth can initially increase defiant behaviors.

A side effect of a treatment does not necessarily indicate that the treatment modality is harmful, or that the practitioner delivering it is incapable. In many cases, unwanted side effects develop for reasons beyond the control of the client or provider. Side effects may also speak to the difficulty of the condition itself and the limitations of our current state-of-the-art treatment.

Side effects that increase client instability, however, should be carefully considered and discussed with clients to better assess the intensity, timing, and use of various interventions based on the ability of the client to tolerate these effects.

It is important to recognize the difference between side effects of effective therapy, versus adverse effects arising from a therapy modality known to be ineffective or potentially harmful.

At OCYF, we advocate open, transparent discussions with clients and families regarding the benefits and normal risks of all effective treatments, including mental health therapy.

It involves family/caregivers when possible.

Families and caregivers are an essential component of a client's life. Effective therapy should seek to involve them in the process when it is safe and appropriate to do so.

Generally, the therapist should encourage family to discuss their impressions and concerns, and when appropriate help the client communicate what they are learning and experiencing during their treatment.

It obtains informed consent first.

As with any health care intervention, the client and any caregivers should clearly understand the risks and benefits in a way commensurate with their level of education. The caregiver should validate the client's understanding to allow for fully-informed consent or assent if underage.

Informed consent documents should consider language, educational, or cultural limitations to ensure proper understanding. They should be written at a level that is easy to comprehend, as even highly literate clients or family members may fail to understand complex language when under stress. For illiterate clients, the document should be read aloud.

Effective therapy should convey to the client a clear sense of what it can (and cannot) do. It should communicate how effective a treatment is likely to be for a disorder, what the side effects might be, and what treatment alternatives exist.

At OCYF, we encourage a full discussion of these issues with clients and their families, as appropriate. We also strongly support clinicians always obtaining informed consent before initiating treatment, and whenever major changes to treatment are proposed.

Warning signs of possibly ineffective or harmful therapy

Unfortunately, some forms of mental health therapy are ineffective or even harmful to our clients. At OCYF we seek to keep our clients from being subjected to any such harmful modalities. Below we outline some characteristics of ineffective/harmful therapies so that they can be readily identified.

Current research on ineffective or harmful therapies:

We have identified research regarding ineffective and harmful therapies. Our citations are not exhaustive, and do **not** necessarily imply endorsement of the authors' viewpoints. Instead, this is intended to give the reader a sense of what the field is currently discussing, and to give credit to those who are working to advance awareness and understanding of these practices.

Ineffective or harmful therapies, with contemporary examples, are discussed by Lilienfeld 2007, Scott 2016, Mercer 2017, Rhule 2005, Norcross 2006, Thomason 2010, Werch 2002, Berk 2009, Holden 2018, and Lilienfield 2017.

Therapists must guard against a temptation to overestimate or under-recognize the potential harms caused by therapy, as discussed in Walfish 2012. It can be hazardous for the therapist to rely solely on informal assessment of client progress when evaluating whether a treatment modality is effective since informal methods are prone to error and unconscious bias from the therapist, as discussed in Lilienfeld 2014. This underscores the need to have structured ways of measuring client health and feedback during the treatment.

Research trials investigating therapies often do not report adverse effects at the same level that would be expected of drug trials, suggesting that the full extent of therapy side effects is still poorly understood in many cases. Structured instruments to measure possible side effects of therapy are being developed, and should especially be considered for new or controversial therapies, as discussed by Rozental 2016. Castonguay 2010 discusses the need to train therapists on how to spot harmful effects of therapy, so that they will be able to identify issues as they practice.

How closely a researcher of a therapy is allied to the treatment (also see Lieb 2016) appears to influence how effective the treatment is perceived to be. This bias underscores the need to take care when examining clinical research conclusions about treatments, a topic that has received notably little attention despite its importance.

Concern about bias also highlights the importance of checking multiple, independent sources when evaluating a treatment (see links to evidence Clearinghouses above).

Characteristics of potentially ineffective and/or harmful therapies

They lack evidence of effectiveness.

It takes a considerable time and effort to rigorously demonstrate that a therapy is safe and effective. Unfortunately, some therapies lacking empirical support are still offered to clients. Advocates of such therapies may, in some cases, try to use other less desirable approaches to build credibility in the community.

Supporters of questionable therapies might avoid discussions about legitimate supporting evidence by using any of the following tactics:

- Anecdotes and testimonials that often tell emotionally charged stories by grateful clients.
- Presentations that try to dazzle the general public with impressive-sounding scientific information around the neurobiology of mental illness. Promoters may, for example, show pictures of "before and after" brain scans, or diagrams of neurotransmitter production pathways to describe specific mental health conditions.
- Poorly designed, non-controlled studies, or studies funded internally by the developer that have few or no controls for bias.
- Studies that don't appear in reputable scientific journals, or that are hard to find through normal scientific literature search methods. Unfortunately, numerous "vanity journals" exist today in which an author may pay to publish their work, often with minimal review standards.
- Questionable therapies sometimes provide supporting material that falsely appears like it was published in a legitimate scientific book or journal (e.g., a peer-reviewed scientific journal).
- Well-designed marketing materials that rely on colorful graphics and persuasive personalities. Promoters use many venues to reach the public, therapists, and child welfare workers, such as conferences, webinars, and cable TV infomercials.

These practices do not by themselves prove something to be ineffective or harmful. That said any therapy that seems to rely exclusively on these methods should be examined with caution

They are costly, without additional benefit over less expensive alternatives.

Newer, aggressively branded, and costly treatment approaches may work no better than older, cost-effective options.

Providers should consider whether any newer treatment justifies the increased cost by considering not just if the new treatment is effective versus wait-list/placebo, but whether it is additionally effective versus cost effective alternatives.

Three steps to assess a costly new therapy modality:

1) Is it proven to be effective for the condition?
2) Is it more effective than alternative, less costly therapies?
3) Does the difference in effectiveness justify the extent of increased cost?

They rely heavily on testimonials to promote them.

Testimonials are an effective marketing tool, hence why famous people are so often paid handsomely to provide them!

Persuasive testimonials are typically client or provider stories curated by the group promoting or offering the service. By their nature, they are very difficult to verify, and there is no way to objectively weigh them against other negative experiences. Heavy use of testimonials should immediately raise further questions. They should never be used as any part of the basis to decide whether to endorse or provide a type of therapy.

They Aggressively Bury Negative Reviews Online

Some businesses have aggressively buried negative reviews about themselves online (e.g. as discussed in this news report about “reputation repair” services). This can create the impression that a service is much more well received than it actually is.

Even effective therapies will have some critics. For example, one can search well-established modalities such as cognitive behavioral therapy (CBT) and find ample examples of such critics. If virtually no negative commentary or questions can be found online or in the scientific literature, this should inspire caution, not confidence. To put it another way, proponents of effective therapies will typically discuss criticisms in an open and transparent manner; proponents of ineffective therapies are more likely to avoid these discussions (Hansson, 2013) or claim that traditional science is being unfair in some way (Hines, 2003).

They cause adverse outcomes from the client’s perspective.

Any therapy intervention associated with an unusually high risk of increased mental health symptoms (or emergence of new diagnoses) is an obvious cause for alarm.

One nuance when assessing adverse outcomes is whether an outcome is considered adverse by the client. For example, a treatment may reduce some unwanted symptoms, but might also increase others. Deciding whether this is an overall positive or negative situation may be somewhat subjective, and that assessment may differ among the client, family, and therapist.

When assessing client outcomes, the provider should seek to understand what outcomes the client and/or family considers most important. This helps ensure that the therapy of choice is one that best serves the goals of the client in a meaningful way.

They increase the variance of good and bad outcomes.

A therapy might cause an increase in *both* good and serious adverse outcomes in a population of clients. For example, if a therapy reduces mild anxiety symptoms, but substantially increases the risk of suicide, then the modality is causing an unacceptable increase in variance of both good and bad outcomes. The “cost” of any serious adverse events should be carefully weighed against whatever potential good it may do. In such cases, safer therapy modalities should be chosen.

They create an unacceptable opportunity cost.

As with any treatment, therapy requires the investment of time and resources from the community, and also from the client. Clients engaged in therapy devote part of their day to it, in addition to any outside homework. Both clients and caregivers must also invest considerable mental effort to make it successful. This investment necessarily displaces something else in the clients’ lives, such as family time, sports, academic pursuits, social/leisure time, or even other mental health treatments.

A therapy that displaces significant other activities without considering this opportunity cost could potentially be an ineffective or even harmful force for a client’s overall well-being. This is particularly true if a therapy has unclear goals, no ongoing measurement of client health or treatment effectiveness, and appears to continue indefinitely without even a theoretical endpoint.

Clients or caregivers who feel that they are “stuck” in this situation should talk openly with their therapist about goals, and whether the therapy is offering enough benefit to continue displacing other important activities.

They cause dependence on the therapist, with loss of independent thinking and decision-making.

Therapy, especially when it is an intensive and lengthy process, carries a risk of becoming a “lifestyle” in which the client learns to chronically rely on the therapist for decision making, and can regress in their ability to make independent decisions.

While some degree of shared decision making is appropriate in therapy, effective therapy works towards independence and eventual exit from the therapy. Exceptions are modalities that double as a hobby or lifestyle pursuit, as for example some art and music therapy groups may do.

Without a clearly established endpoint, therapy is it increased risk of progressing towards a “paid friend” that the client never wishes to leave, rather than a teacher who guides the client in learning, and towards eventual graduation.

In the case of foster care or severe mental illness, therapists may actually function as one of the few stable “friends” that the client has in their otherwise chaotic life. As uncomfortable as it is, however, the therapist should consider whether their position as a “stable, paid friend” is indeed the best use of resources, and whether the client might be better served by also focusing on building the skills to form social connections with family, or find new, healthy friendships in their community.

Older people living with mental illness may also experience fewer authentic supports as their friends and family members decline through problems of aging or death. As they become more dependent on others in a time of their own decline it is important to understand the complex nature of caregiving, caring and treating people where they live. Those in 24 hour care will require natural bonds of affection from caregivers alongside the clinical or therapeutic services rendered.

They try to dazzle the client with impressive-looking jargon, diagrams, and image.

Truly ethical therapy should place a premium on helping clients understand the practical, real-world value that it offers them, and do so in terms the layperson can understand and confidently evaluate. It should never seek to dazzle, distract, or confuse the client.

Examples of Understandable Therapy Goals Include:

- improve self-confidence when talking to groups of people
- reduce excessive worrying that keeps you awake at night
- develop the ability to write out and discuss the details of a prior traumatic event in a confident and balanced way
- gradually reduce compulsions to repeatedly check door locks

These kinds of practical, easy-to-understand explanations of the purpose of a therapy allow clients to take control of their health care decisions, and make an informed choice about whether to pursue a specific treatment. It also gives the client a clear sense of what treatment success should feel like if it is working correctly.

Any treatment explanation that does not do this but instead focuses on complex, impressive-looking scientific diagrams, brain-scan pictures, or stories about changes in neurotransmitter levels and brain wave functions should be regarded with suspicion.

As a rule of thumb, unless one is attending an academic research conference or reviewing a scientific publication, it is often useful to avoid treatments that rely on complex, “scientific sounding” explanations for why the client should pursue the treatment.

Truth values openness, clarity, and simplicity. Dense complexity can be used as a smokescreen to distract and conceal problems.

They avoid discussing treatment outcomes and switch focus to the process.

Effective therapy modalities that produce clear, positive changes in clients are often quite happy to share outcome data with anyone interested. Modalities that have not proven they can produce good clinical outcomes may instead seek to focus on process questions, which are often easier to address.

For example, a therapy that is able to show that it decreases the rate at which clients attempt suicide is showcasing an important outcome. A therapy that avoids revealing the rate of suicidal activity after treatment, and instead directs the listener towards how thorough and compassionate the method is, is focusing on the process.

While understanding process is important, it does not actually answer the question of whether the therapy effectively addresses the desired outcomes. Therefore, when trying to decide whether to implement or support a therapy, there is no point investing time considering the process until the outcomes are understood and found to be acceptable.

In some cases, little or no outcome data exists for any of the available therapies targeting a specific problem. In this case, an organization may have to choose a therapy modality that has no outcomes data. Again, in such cases the modality should still be rooted sensibly in science more broadly.

> Therapy outcome(s) versus process is a key difference that should always be considered when determining if a therapy modality is appropriate. Process data is much less helpful than Outcomes data when assessing the usefulness of a therapy.

Therapies with no solid outcomes data should be approached in a tentative way, as something still in a research phase. Important client outcomes should be monitored closely by the organization to determine if the modality is indeed helping their client population, and if the modality should continue to be used.

Conclusions and recommendations for Colorado providers

Thank you again for caring for the citizens of Colorado, and ensuring they always receive the highest quality therapy possible!

A few summary thoughts:

- Evidence-based therapy practices are by definition better for clients than those that are unproven. There are organizations that summarize this data for us.

- Several organizations provide free information about whether a therapy is evidence-based. Use them when possible!

- One of the best things you can do for clients is measure client health and progress frequently during therapy.

- The engagement skills and capability of the therapist is extremely important, and should be routinely monitored through supervision and client feedback.

- Pick the least burdensome and expensive therapy that will produce the desired clinical outcome.

- Consider the opportunity cost of a therapy.

- Even effective therapy can have side effects, and these should be openly discussed.

- The best therapies will ensure that they provide benefit above any other activity in the client's life that they displace.

- Avoid therapies that avoid independent research.

- Be skeptical of testimonials, flashy claims, and charismatic presenters when considering whether to adopt a therapy modality. Look for the independent evidence and critical reviews.

- Be cautious of therapies that try to impress the reader with overly complex scientific words, diagrams, or images that would be more appropriate for a specialized scientific conference.

- Be cautious if critical reviews of a therapy cannot be easily found.

- Focus on outcomes data, not process discussions, whenever possible.

Appendix A - Levels of Evidence

The Family First Prevention Services Act does an excellent job of detailing various levels of evidence support for therapies and other practices, and these are cited below:

PROMISING PRACTICE—A practice shall be considered to be a 'promising practice' if the practice is superior to an appropriate comparison practice using conventional standards of statistical significance (in terms of demonstrated meaningful improvements in validated measures of important child and parent outcomes, such as mental health, substance abuse, and child safety and well-being), as established by the results or outcomes of at least one study that—

(I) was rated by an independent systematic review for the quality of the study design and execution and determined to be well-designed and well-executed; and
(II) utilized some form of control (such as an untreated group, a placebo group, or a wait list study).

SUPPORTED PRACTICE—A practice shall be considered to be a 'supported practice' if—

(I) the practice is superior to an appropriate comparison practice using conventional standards of statistical significance (in terms of demonstrated meaningful improvements in validated measures of important child and parent outcomes, such as mental health, substance abuse, and child safety and well-being), as established by the results or outcomes of at least one study that—

(aa) was rated by an independent systematic review for the quality of the study design and execution and determined to be well-designed and well-executed;
(bb) was a rigorous random-controlled trial (or, if not available, a study using a rigorous quasi-experimental research design); and
(cc) was carried out in a usual care or practice setting; and

(II) the study described in subclause (I) established that the practice has a sustained effect (when compared to a control group) for at least 6 months beyond the end of the treatment.

WELL-SUPPORTED PRACTICE—A practice shall be considered to be a 'well-supported practice' if—

(I) the practice is superior to an appropriate comparison practice using conventional standards of statistical significance (in terms of demonstrated meaningful improvements in validated measures of important child and parent outcomes, such as mental health, substance abuse, and child safety and well-being), as established by the results or outcomes of at least two studies that—

(aa) were rated by an independent systematic review for the quality of the study design and execution and determined to be well-designed and well-executed; (bb) were rigorous random-controlled trials (or, if not available, studies using a rigorous quasi-experimental research design); and (cc) were carried out in a usual care or practice setting; and

(II) at least one of the studies described in subclause (I) established that the practice has a sustained effect (when compared to a control group) for at least 1 year beyond the end of treatment.