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Contemporary Formulation-based Assessment and Treatment: A Framework for Clinical Discourse

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Abstract

With the relentless push for efficient and effective mental health treatment, service delivery has evolved from inpatient and outpatient therapy to multi-component interventions provided collaboratively across a continuum of treatment settings by a range of disparate disciplines, including mental health providers, medical providers, case managers, social workers, residential and social service providers, and managed care stakeholders. This new paradigm for mental health treatment calls for a need to modify traditional psychodynamic case formulation approaches, which have focused primarily on synthesizing clinical data to inform predominantly long term psychodynamic therapy. This paper details a new approach to clinical formulation that allows for the provision of targeted, optimal, efficient, and effective care by linking a biopsychosocialspiritual understanding to a biopsychosocialspiritual suite of interventions executed by a coordinated, multidisciplinary team of service providers. Finally, the paper concludes with a discussion of strategies for implementing formulation-based assessments and treatment plans.

Keywords: Psychological assessment; Case formulation; Treatment planning

Introduction

The clinical formulation is the understanding of a patient's difficulties that is synthesized from a wide array of clinical data [1]. It goes beyond mere diagnosis to a more comprehensive explanation [2]. The formulation helps to organize and summarize a large amount of clinical data and generate empathy for the patient [3]. The formulation explains what is wrong and what needs to be done about it. It generates hypotheses that then guide treatment [4,5]. The formulation not only synthesizes information from biological, psychological, social (including systemic factors) and spiritual domains, it also synthesizes multiple theoretical perspectives, including biological, cognitive-behavioral, psychodynamic, interpersonal, and psychospiritual domains [1]. Since clinical knowledge about a patient is never complete, the formulation is tentative and evolving over time as clinicians test hypotheses and receive new information [3].

Traditional approaches to formulation have been psychodynamic and psychoanalytic in nature, with a focus on outpatient treatment to the exclusion of more intensive treatments [3,6-8]. In these approaches, clinicians focus on object relations, transference, drive, ego, and self. Others have argued for expanding the synthesis to include biological, behavioral, cognitive, developmental, existential, and sociocultural factors, leading to a more comprehensive understanding followed by more comprehensive treatment [9,10]. Weerasekera offers the most comprehensive framework for collecting and integrating clinical data using a "Multiperspective Grid" that details predisposing, precipitating, perpetuating and protective factors along a biopsychosocial spectrum that includes, biological, behavioral, cognitive, and psychodynamic factors along with social/systemic factors such as couples issues, family conflict, occupational/school concerns, and general social/environmental problems such as lack of support, isolation, race, gender, and class issues, lack of social skills, and adverse environments. Although the author appropriately mentions referrals to other disciplines to meet a patient's needs, she stops short of articulating a comprehensive biopsychosocialspiritual treatment plan that is provided by an integrated and coordinated team. The literature to date also neglects the implementation of a formulation-driven treatment plan in a contemporary mental health treatment system that is comprised of multiple social and clinical settings and intensities of service in which patients receive a wide array of clinical and social interventions provided by a variety of disciplines.

Very little has been written on formulation since the 1990s, with only 10 articles found in a search of the PubMed database, (PubMed search 4/28/16). Bohmer discusses the psychodynamic formulation [11]. Others the difficulties of teaching formulation skills to students and offer formulation techniques such as visual metaphors, and techniques for categorizing of psychosocial factors [11-17]. Still others write about the emerging capacity to include neurobiological factors in a formulation [18,19]. Hartley et al. discussed the relationship between psychological-mindedness and the capacity to synthesized a formulation [20]. Finally, in a study of clinicians' formulations, Eells et al. note the significant gap between theory and actual practice, as 94% of clinicians fail to integrate and synthesize descriptive information into working hypotheses to direct their treatment [21]. No one has proposed a pragmatic, structured approach to formulation-based treatment planning that helps clinicians and other professionals provide efficient and effective multidisciplinary and multicomponent treatment along a continuum of care in todays' managed care environment with its emphasis on collaborative care.

As a result of the failure to construct contemporary systemic clinical formulations, most current clinical assessment approaches have yet to fully achieve the twin goals of optimizing fiscal and clinical quality. We have not yet implemented approaches to clinical assessment and intervention that insure that clinicians and their colleagues will reliably

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do the right things at the right times, skillfully and effectively, for each patient.

In today's mental health system, while many patients seek out outpatient treatment, other patients frequently begin treatment in acute settings such as emergency rooms. Clinicians must determine the nature and degree of impairment and risk, and the intensity of services required to alleviate impairment or risk. Because of managed care companies have developed a number of structured, criteria-based utilization management systems to help shape the clinician-payer dialogue. These systems use psychiatric protocols or algorithms to help utilization reviewers gather pertinent data to make benefits-certification decisions. If a patient meets a particular set of criteria, then particular benefits in the form of clinical services ensue.

This methodology has achieved partial success in matching intensity of services to severity of impairment or risk. It has led to significant reductions in the overutilization of inpatient services for patients who can otherwise recover in less intensive treatment settings. Clinical assessment criteria have done a great deal to standardize the way behavioral health professionals think and talk about the intensity, or level, of care patients need.

But with the increased structure and standardization of psychiatric assessment comes a paradox. The main drawback of most current protocol-driven clinical assessment approaches is that they go directly from a profile of symptoms or behaviors to a choice of treatment modalities (services), bypassing a clinical understanding (the formulation) of the patient and of what needs to be done to help. Good treatment starts with, and is guided by, a sound clinical understanding of the patient—thus the need for a formulation-driven treatment plan.

Highly structured clinical assessment protocols carry the risk of reducing evaluating clinicians to "Clinical Clerks" who spend their time collecting clinical facts and following algorithms for service determinations. Clinicians must resist the temptation to focus solely on managing their forms in their efforts to comply with requirements. If this occurs, the engagement with the patient may first serve regulatory and documentation requirements at the expense of a clinical understanding of the patient. When this occurs, patients may experience therapeutic benefits by chance, or because of other processes or interventions not articulated in the structured assessment process.

The antidote to this dilemma is to link structured approaches to clinical assessment with the synthesis of a solid clinical understanding of the patient. This paper lays out a pragmatic conceptual approach to assessment and treatment planning that more effectively and consistently optimizes clinical and fiscal outcomes by basing all clinical activities upon the formulation and detailing a systemic suite of clinical and social interventions, as opposed to generic services, to help patients recovery and heal.

Formulation-Based Psychiatric Assessment and Treatment

Many clinicians provide formulation-based care to some degree. Some can intuitively weave together biological, psychological, social and spiritual factors of the patient's dilemma into a coherent whole. Clinicians deduce, or synthesize, the formulation from the body of clinical facts collected during the clinical assessment. The formulation is a heuristic construct. A good formulation results from the application of clinical skill. It is always tentative, and always evolving, as the understanding of the patient and their system (friends, family members, providers, social services community and culture) deepens with time [1].

Effective treatment cannot occur without a formulation, except by accident, because the formulation informs the treatment. Similarly, the treatment informs the formulation, leading to a reciprocal process that deepens the formulation over time and strengthens the treatment.

The formulation and resulting treatment plan should be sustained and developed over time, from setting to setting, from agency to agency, and provider to provider. This is true continuity of systemic care. Ideally, everyone should be working from the same formulation, and thus be executing consistent and complementary interventions.

Clinicians and other providers need a framework for clinical discourse that resides one level above the collection of facts, at the level of clinical understandings, in order to derive a formulation.

Developing a shared formulation among clinicians brings several benefits. Perhaps foremost, it promotes an understanding of the patient. Understanding the patient's dilemma, how they got into their dilemma, and what can be done about it allows clinicians, utilization reviewers, and other providers to talk about clinical strategies and interventions first, rather than going directly to a discussion of levels of care or service modalities. This transforms disposition decisions from decisions based solely on impairments and risk to decisions based on modalities required to execute particular interventions to achieve particular goals.

For example, after arriving at a formulation, two clinicians may agree that a suicidal patient requires 24-hour containment, support and observation, medications, and interpersonal combined with cognitive-behavioral psychotherapy to decrease their alienation and put their dilemmas into a workable perspective. These are the interventions. These interventions may be accomplished at an inpatient, residential, or even intensive outpatient level of care, based upon the formulation of the patient's strengths, vulnerabilities and resources.

Finally, formulation-based discourse with clinicians harnesses the clinical experience, skill and savvy of clinicians to their optimal effect. It shifts the emphasis from a discussion of modalities to a discussion of interventions, from the generic to the specific treatment needs of each patient. It improves the morale of clinicians by empowering them to exercise their clinical skills. It improves collaborative relationship by engaging all parties in respectful, collaborative clinical discussions.

The Five Elements of a Formulation

The formulation literature detailed above describes five basic elements of a formulation as depicted in Table 1.

Impairments

In today's managed care environment, the primary impairment becomes the primary focus of treatment in order to restore functioning, reduce risk, and transition patients to the next level of care as expeditiously as possible. Treatment focuses on barriers to discharge, which relate to amelioration of the primary impairment. The formulation then focuses on what is the primary impairment (in terms of risk or functional impairment) and how did it come about? Secondary impairments are secondary in that, while perhaps very important, they can be addressed as a lower level of care.

Precipitants

Rarely do impairments appear "out of the blue", with no destabilizing stressors. Precipitants may be overt and obvious, such as the death of a loved one, or loss of a job, or more covert, such as undisclosed sexual abuse or substance abuse.

Element	Description
Impairment/risk	• Primary Impairment/risk • Secondary Impairments/risks • Can involve danger to self, others, or severe impairments in functioning (such as inability to provide for one's food, clothing, or shelter). • Can involve impairments in well-being, such as depression or anxiety, impairments in relationships, or impairments in work or school.
Precipitants	• Biological (e.g. medical illness, neurobiological factors, major mental illness) • Psychological/Behavioral (e.g. substance abuse, medication noncompliance,) • Social (e.g. financial stresses, loss, relational conflict, trauma, abuse, neglect, unemployment, adverse living environment)
Vulnerabilities	• Coping (or lack of coping) strategies in response to precipitants • Self-care or social skills deficits • Character disorders • Physical and Biopsychiatric illness or predisposition to illness, and disabilities • Natural resource deficits (e.g., friends, family, housing, employment, financial, community)
Strengths and Resources	• Family, friends • Financial • Housing • Work • Social services • Treatment resources • Coping skills and positive character traits • Intelligence • Education
Agendas (overt and Covert)	• Of patient and their system (e.g. significant others, providers, social service professionals, Insurance payers, legal, others)

Table 1: The five elements of a formulation.

Precipitants may be proximal or remote. Patients may attempt to cope with stresses in ways that create further stresses that lead to impairment, such as when a patient stops their medications in the face of financial stresses. In this case, the proximal precipitant that led to impairment would be the dysfunctional coping strategy of stopping medications and the remote precipitant would be the financial stresses. Substance abuse is another example of what is often a remote precipitant of more proximal precipitants, such as loss of home, job, or marriage.

Vulnerabilities

All people experience stress. Impairment in the face of stress results from the presence of vulnerabilities. Vulnerabilities may cause or perpetuate impairment, and may exist in the patient, their "system", or both.

Vulnerabilities span the biopsychosocialspiritual spectrum. Vulnerabilities can reside within the patient, in their external world, or both. Internal vulnerabilities include self-care and social skills deficits, physical or psychiatric disabilities, character disorders, and genetic predispositions to psychiatric illness, genetic, developmental vulnerabilities, a history of trauma or neglect, and character pathology. External vulnerabilities include interpersonal conflict and abuse, work or school stresses, a lack of treatment, social services, educational, vocational or financial resources, or a lack of social supports. External vulnerabilities also include living in a toxic environment or being the victim of racial, gender, or class discrimination. Often internal and external vulnerabilities interact synergistically to create heightened vulnerability.

Strengths and resources

The formulation includes an understanding of the patient's strengths and resources that can be leveraged for healing. This may include what contributed to prior periods of stability and functioning. It may include positive character traits, social skills, and coping strategies. Often it includes the presence of providers and supportive family and friends.

Agendas

When patients present for treatment, they and their "system" (their family, friends, providers, caretakers, payers, etc.) all have agendas, or goals for what they want out of the treatment. Agendas stem from suffering, needs, desires and fears. These agendas may be overt, such as the desire of a depressed person to feel better, but often they are covert. Clinicians deduce covert agendas using their clinical skill. Covert agendas sometimes include desires by family members to focus on the "identified patient" to avoid addressing other painful issues in the family. A patient who makes a suicidal gesture almost always has a covert agenda to communicate their distress or anger to someone important to them.

Understanding the multiple agendas of the patient and their system becomes important when crafting the goals and strategic interventions of the treatment. The agendas serve as motivational forces to be harnessed for therapeutic gain, or to be skillfully managed or modified in order to reduce resistance to necessary change.

Developing a Formulation

Perhaps the greatest demand for clinical skill lies in the clinical assessment. Clinicians must ask the right questions to get the right details in order to gather the information they need to construct an adequate formulation. A skillful clinician uses their clinical judgement to direct their inquiry through a morass of clinical details in order to synthesize the formulation in a timely fashion.

What is wrong?

The clinician first asks questions about the impairments or risks that bring a patient to treatment. This involves understanding what the patient or others did or did not do that caused impairment or risk. It may involve only things the patient stated of their thoughts, plans and intent, or things the patient actually did. Typically certain events equate to what is wrong, such as a patient attempting to hurt themselves or others, or being found by the police incoherent and creating a public disturbance.

What happened

Unfortunately, common assessment practices tend to capture the static facts of a patient's story, at the expense of the dynamic elements required to truly understand the patient and develop the five elements of the formulation. For example, a presenter may say, "the patient hit

their mother and sister", without any details regarding the sequence of events that led to this unfortunate conclusion. "What happened" is not one event, but a dynamic sequence of events that unfold over time in a particular context. Often, a remote set of precipitants or stresses will trigger a chain reaction of maladaptive coping that will lead to more proximal precipitants that more directly trigger impairment. Understanding the dynamic aspects of what happened reveals key information about precipitants, vulnerabilities and agendas.

For example, a patient may present suicidal, saying she lost her job. The naïve clinician may stop here, feeling they understand the situation. The more experienced clinician will delve into the sequence of events from before the loss of the job, to the loss of the job to the subsequent appearance of suicidality. They may discover that the patient was laid off due to alcohol abuse, went home to tell her husband, who then berated her and threatened to divorce her. In the face of abandonment, the patient may have concluded she was inadequate and undeserving of support, and thought that since she was to soon be alone, that the best option would be to end her life. In this case the verbal abuse, perhaps mediated by the husband's frustration and anger over his wife's drinking, threat of abandonment, and lack of support from her husband would be considered the proximal precipitant for her impairment and the chief focus of initial strategic interventions, followed by attention to her substance abuse, followed by attention to her vocational stress.

The "Why Now"

Another way to understand what happened is to ask **Why** is the person here **Now**? Why a patient presents for treatment is not equivalent to the precipitant. It speaks instead to the patient's vulnerabilities, strengths, and resources. In our example above, the reason the patient presented as suicidal had to do with her low self-esteem, dependency needs, and insufficient assertiveness skills, as well as her tendency to go to abusive relationships for support. It was not because of her substance abuse or because she lost her job.

Often precipitants, stresses, or perpetuating factors appear to be chronic, such as homelessness, relational impairment, vocational stresses, adverse environments, or substance abuse. Understanding the anatomy of exactly what happened in the time period just prior to the patient's presenting for treatment helps the clinician understand what combination of other more proximal precipitants and vulnerabilities led to the patient's acute impairment. A homeless person may present with an exacerbation of psychosis after being assaulted. A chronic substance abuser may present after spending all their funds and having no money for food or rent. A chronically suicidal patient may present when their therapist goes on vacation.

Understanding **Why** the patient presents **Now** reveals how the patient and their system attempted or failed to cope with their difficulties, giving the clinician a crucial understanding of the vulnerabilities needing attention. It also helps make clear what strengths the clinician may leverage for stabilization and recovery, and what resources might be brought to bear on the patient's behalf.

Who is involved and what do they want?

Here the clinician identifies the patient's "system." The system consists of the patient's family, friends, clinical providers, social service providers, employers, teachers, legal agents, and insurance payers. Each of these agents in the patient's life will have their particular agenda for the patient. They may have particular resources they can provide for the patient, or contribute particular stresses that must be managed.

In the case of the suicidal unemployed wife, careful questioning may reveal there is a supportive brother who lives close by who can monitor the patient while she undergoes detoxification treatment. A quick telephone call may be all that is required to recruit his support and a place to stay, thus avoiding an unnecessary hospitalization. In another, more malignant situation, a clinician may learn that a young girl brought in for hitting her mother has been sexually abused by the mother's boyfriend, and that the mother does not want this revealed in order to preserve her relationship with her boyfriend. As each of these examples illustrate, understanding who is involved, what they want, and what they can provide has a profound impact on the formulation and resulting treatment.

Prior successes

Often patients will have had long periods of successful coping with their stresses and vulnerabilities. For example, an alcoholic may have a 20 year history of sobriety and successful lapse management. Understanding what worked in the past helps clinicians plan for therapeutic interventions based on what worked before. Understanding the elements of prior successes also helps clinicians determine what elements might be missing in the patient's current situation.

The Formulation-Based Treatment Plan

Developing the treatment plan is treatment

The assessment, development of the formulation, the development of the treatment plan, and the treatment all overlap and intermingle, rather than occurring sequentially and discretely. Skillful clinicians use the assessment to empathetically engage the patient and their system to develop a shared formulation (to the extent possible), and to negotiate a treatment plan.

Assessing a client and developing a shared formulation and treatment plan is in fact the first therapeutic intervention the patient and their system experience, and is treatment. The clinical act of making clear the nature of the patient's dilemma and their needs can be profoundly therapeutic. It will frequently modify the clinical outcome. Patients often react with great relief to the experience of being understood. They often experience a resurgence of hope when their clinician lays out a set of interventions that they think will help. In our examples, the supportive brother was able to take home his suicidal sister. The sexually abused daughter may be able to go home if the mother agrees to prevent further sexual abuse in response to a clinical intervention and the recruitment of outside social services.

For these reasons, the clinician should strive to develop the formulation and treatment plan as a part of the assessment, and see the assessment as a crucial therapeutic intervention.

Elements of the formulation-based treatment plan

There are 4 basic elements to a treatment plan derived from a formulation, as outlined in Table 2.

The focus of treatment

In today's managed care environment, treatment needs to be focused. Clinicians need to negotiate with patients and others the focus of treatment with the primary impairment in mind. Not every problem can be solved at once. An abused, suicidal, homeless woman addicted to heroin who just lost custody of her child will not have all her problems resolved at once. There is a hierarchy of issues and impairments, with some needing resolution first in order to address the others. The initial

Element	Description
1. The Focus of Treatment	The primary impairment. Secondary impairments are articulated, but are not the initial focus of treatment.
2. Negotiated Objectives of Treatment	Changes required to transition the patient to the next level of care or phase of treatment. Objectives can be categorized into primary or initial objectives, and secondary or subsequent objectives.
3. Interventions Required to Achieve Treatment Objectives	These are very specific to the patient and their situation, designed to address impairments and achieve objectives, such as: • "Medications for psychosis", or • "24-hour locked containment and supervision to prevent self-harm," or • "Recruit a supportive resource for the patient to live with", or • "Help patient to make better choices about who to go to for support", or • "Help patient to review life goals and how their drug abuse affects their achievement of these goals".
4. Methods and Modalities of Treatment	These are more generic descriptions of the services and resources required to execute treatment interventions, such as "individual psychotherapy," "family therapy," "psychopharmacology," "supportive housing," or "inpatient hospitalization."

Table 2: The formulation-based treatment plan.

focus of treatment follows the "first things first" rule, with attention first to reducing risk and improving stability. This is why good clinicians will first attend to suicidality or homicidality by implementing supports, structures, treatments, and supervision to reduce risk. This is also why providing supportive housing has been shown to be the first step in treating homeless, mentally ill alcoholics who may be starving, freezing, and experiencing abuse and exploitation on the streets.

Negotiated objectives of treatment

A good formulation strengthens the clinical alliance, which helps clinicians come to an agreement with the patient and their system on how to address impairments, given everyone's overt and covert agendas. The objectives need to be specific, measurable, and attainable. Objectives need to be sequenced, with the initial objectives developed to address the initial focus of treatment, or primary impairment. Objectives might include "protect patient from self-harm," or "safely detoxify," or "obtain shelter," or, "resolve stressor," or "resolve anxiety."

Interventions required to achieve treatment objectives

With clear and focused objectives articulated based upon a well-developed understanding of the patient, clinicians and others can then offer to patients and their system a suite of specific, targeted interventions to achieve the treatment objectives. In the example of the newly-unemployed alcoholic suicidal woman, one intervention was to recruit the brother's support for a safe place to stay. Another intervention might be to meet with the husband to assess his willingness and capacity to improve his relationship with his wife. Yet another intervention might be to provide outpatient detoxification to help the patient get sober. As patients achieve initial objectives, interventions change in order to meet subsequent objectives.

The formulation-based treatment plan will often require interventions by a variety of clinical and social services providers, calling for clinicians to negotiate, organize, and coordinate the treatment among a team of providers.

Methods and modalities of treatment

Clinicians and other professional can execute interventions via any number of methods and modalities, depending on the formulation of the patient's impairments, vulnerabilities, strengths, and resources. Once clinicians have specified and agreed upon specific interventions with patients, then the methods and modalities for executing these interventions can be determined. If someone is homeless and actively suicidal, with the initial objective being to prevent suicide, and the intervention to provide 24-hour support and monitoring to prevent self-harm, then an inpatient hospitalization is indicated as the appropriate modality of treatment to provide this intervention. On the other hand, if the patient had supports and voices a wish to receive help for his wish to die, then a loved one might provide 24 hour monitoring and support in conjunction with clinicians in a partial hospital program.

Since different interventions may need to be provided by different methods and modalities, the clinician is again called upon to work with the patient and their system to arrange for these service modalities.

Implementation Strategies

Clinicians face several barriers in their attempts to glean the formulation from their clinical encounters and insure the implementation of a formulation-based treatment plan. These barriers include:

- Variations in clinician skill, experience, and motivation;
- Unavailability of information from patient or key members of their system;
- Information system requirements or clinical algorithms that structure the assessment process in ways that complicate a higher-level discussion of the formulation;
- Structures that prevent communication between the patient, their clinicians, and other service providers;
- Variations in the skill, experience and motivation of other service providers and supervisors.
- Lack of resources required to execute the needed interventions.

Several strategies will help for these challenges:

Establish clear expectations, standards, policies and procedures

This includes establishing consistent approaches to clinical evaluation and a formulation-based framework for clinical discourse. Clinical assessment policies and practices, and internal documentation and communication procedures should all support formulation-based discourse among supervisors, clinicians, utilization reviewers, and other service providers.

Take the long view

Changes in entrenched clinical assessment and treatment practices do not occur overnight. Supervisors should focus on "winning the war" rather than each battle. They often face situations that are unworkable, often because of issues with clinician skill, or differing expectations. In these situations, a supervisor may opt to agree to a treatment plan while stipulating expectations, or pass on concerns to another supervisor to

be addressed at a later time, and not in the "heat of battle". Supervisors should see each interaction with a clinician as an opportunity to prepare for the next interaction by leaving the clinician with a clear understanding of the supervisor's expectations.

Get System-wide buy in

Clinicians should understand the supervisor's expectations that clinicians strive to develop and present a formulation and formulation-based treatment plan when discussing cases. Since this approach is based on long-established clinical principles and traditions, there should be no argument as to the merit of this approach. Trainings and publications will help to establish expectations and foster dialogue around this approach to psychiatric assessment and treatment.

Set up ongoing structures for training and coaching

Developing formulations and formulation-based treatment plans requires clinical experience and skill. Supervisors face additional challenges in their attempts to influence clinicians to develop good formulations. Learning these skills is not an event, but a lifelong process, requiring ongoing practice, training and coaching.

Move the level of clinical discourse up one notch

Clinicians almost universally know at least part of the formulation when discussing cases. They may resort, however, to the recitation of clinical data rather than discussion of a synthesized understating of the patient. When this happens, clinicians should bring the focus back to what is needed to develop a better understanding of the patient and thus their treatment needs.

Use Socratic, temporizing and shaping interventions

Socratic questioning is a method in which Supervisors or other clinicians start with a clinician's assertions and then ask about the logical consequences or antecedents of these assertions. For example, a clinician may say that a patient is suicidal, but will not be suicidal in the hospital. A supervisor, utilization manager, or care manager might ask, "What is it about the hospital that makes the patient feel safe, and how might those conditions be created for the patient out of the hospital?" Temporizing interventions give the clinician and others time before coming to a final decision. This might include deciding on a short-term course of more intensive treatment in order to accomplish particular tasks or to complete a formulation. Shaping interventions include recognizing and reinforcing good-faith efforts to develop a formulation, and providing specific positive feedback to clinicians when they present good formulations and formulation-based treatment plans.

Create systems that optimize the continuity of the working formulation and the coordination of treatment

The formulation is always tentative and evolving, as is the treatment plan and treatment. Patients often quickly transition from one treatment modality or setting to another, from one set of providers to another. Subsequent clinicians and other service providers picking up a case as treatment progresses should be able to build on the work of previous clinicians, rather than starting from scratch, and modify the working formulation and treatment plan over time. Documentation and information systems should emphasize the synthesis of the formulation over the collection of raw clinical data and maintain this synthesis over time from setting to setting.

Summary

A formulation-based approach to treatment yields improved clinical outcomes and a more parsimonious, targeted use of interventions to achieve these positive outcomes. Clinicians need a conceptual framework for formulation to direct their assessment and treatment planning.

Today's evolving mental health treatment system increasingly emphasizes efficiency and accountability, including accountability for positive clinical and satisfaction outcomes. To accomplish this, we are evolving multiple levels of care and treatment settings, integrating social supports and services with clinical services, and fostering collaborative care among a team of multidisciplinary providers. Although a place still exists for an outpatient provider to construct a formulation and psychotherapy treatment plan independent of other providers and services, in many circumstances the patient's needs call for communication, coordination, and collaboration among an ever-changing team of providers. Ideally, everyone involved can contribute to the ongoing and evolving dialogue about impairments, treatment/service objectives, interventions and modalities, thereby strengthening the formulation and treatment plan through a collaborative process, as many heads are better than one. In the emerging age of collaborative care, formulation will hopefully become a team sport. Hopefully the framework for clinical discourse described in this paper will help administrators to develop information, management, and training systems that raise clinical dialogue and treatment planning beyond data and treatment modalities to clinical understandings and effective, targeted, coordinated, multisystem interventions based upon these clinical understandings.

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