

Strengthening the Status of Psychotherapy for Personality Disorders: An Integrated Perspective on Effects and Costs

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Objective: Despite scientific evidence of effectiveness, psychotherapy for personality disorders is not yet fully deployed, nor is its reimbursement self-evident. Both clinicians and health care policy-makers increasingly rely on evidence-based medicine and health economics when determining a treatment of choice and reimbursement. This article aims to contribute to that understanding by applying these criteria on psychotherapy as a treatment for patients with personality disorder.

Method: We have evaluated the available empirical evidence on effectiveness and cost-effectiveness, and integrated this with necessity of treatment as a moderating factor.

Results: The effectiveness of psychotherapy for personality disorders is well documented with favourable randomized trial results, 2 metaanalyses, and a Cochrane review. However, the evidence does not yet fully live up to modern standards of evidence-based medicine and is mostly limited to borderline and avoidant personality disorders. Data on cost-effectiveness suggest that psychotherapy for personality disorders may lead to cost-savings. However, state-of-the-art cost-effectiveness data are still scarce. An encouraging factor is that the available studies indicate that patients with personality disorder experience a high burden of disease, stressing the necessity of treatment.

Conclusions: When applying an integrated vision on outcome, psychotherapy can be considered not only an effective treatment for patients with personality disorder but also most likely a cost-effective and necessary intervention. However, more state-of-the-art research is required before clinicians and health care policy-makers can fully appreciate the benefits of psychotherapy for personality disorders. Considerable progress is possible if researchers focus their efforts on evidence-based medicine and cost-effectiveness research.

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Clinical Implications

- From an effectiveness point of view, psychotherapy is the treatment of choice for personality disorders.
- The limited evidence about cost-effectiveness and necessity suggests that psychotherapy for personality disorders is a cost-effective treatment for patients with a high burden of disease.
- To understand and influence health policy-making in mental health care successfully, clinicians need to adopt an integrated perspective on effectiveness, cost-effectiveness, and necessity.

Limitations

- Some so-called effectiveness studies are in fact efficacy trials and most effectiveness research is limited to borderline and avoidant personality disorders.
- The evidence on cost-effectiveness is limited to borderline personality disorder and involves cost-minimization studies rather than state-of-the-art economic evaluations.
- The evidence on burden of disease is still scarce.

Key Words: *personality disorders, psychotherapy, treatment outcome, health care costs, burden of illness, treatment efficacy, cost-effectiveness, program evaluation*

During the last decade, research has shown that psychotherapy is an effective treatment for patients with personality disorder (for example¹). Despite scientific evidence of effectiveness, psychotherapy is not fully deployed in personality disorders, nor is its reimbursement self-evident. In this article, we argue that psychotherapy has the potential to be the treatment of choice for people with personality disorder and the potential to be valued highly by society if research and practice work together to present more convincing evidence to the medical field and the outside world.

Today, both clinicians and health care policy-makers increasingly rely on evidence-based medicine and health economics when determining a treatment of choice and reimbursement.^{2,3} A possible explanation for the leeway of psychotherapy in personality disorder could therefore be a mismatch of the presented scientific evidence and modern standards of evidence-based medicine and health economics. These modern standards not only focus on efficacy (Does this treatment work in a well-controlled environment?) but also on the added value and costs for patients and society. The status of psychotherapy as a valuable treatment for patients with personality disorder will be endorsed if the psychotherapy field adopts these modern standards.

Understanding of this reasoning by clinicians working with patients with personality disorder is warranted for several reasons. The first is that clinicians should be inspired to enhance their level of clinical practice according to the modern demands of evidence-based practice. A second reason is that clinicians are held more and more responsible for managing the scarce resources in health care as efficiently as possible to deliver beneficial interventions to as many patients as possible.³ Notably in the development of practice guidelines, it is important for clinicians to adopt modern quality standards, otherwise the increasing number of treatment options in personality disorder would be associated with increasing medical costs to be paid by society. One more reason to plea for the adoption of new clinical quality norms is the strategic argument of professional autonomy: if clinicians ignore the recent developments of evidence-based medicine and health economics, the risk is that mental health care decisions are taken by policy-makers alone and clinicians lose influence on developments in their own professional field.

The reasons mentioned above provide the rationale to accumulate and integrate empirical evidence and provide convincing arguments for the benefits of psychotherapy for personality disorders. In pharmacy, such integration already exists. In many countries the pharmaceutical industry has to

convince physicians and reimbursement authorities that their medication is safe, effective, and cost-effective. Moreover, reimbursement authorities may ask for evidence concerning the necessity of the treatment. This quest for comprehensive evidence in reimbursement issues is no longer limited to pharmaceuticals. It is becoming more and more accepted as the preferred route for implementation of all medical interventions.³ If we apply this line of reasoning to psychotherapy for personality disorders, we have to create new standards of evaluation to strengthen the position of psychotherapy. This article aims to contribute to that understanding, by applying the criteria of evidence-based medicine on psychotherapy as a treatment for patients with personality disorder. We will do this by critically analyzing the available empirical evidence on effectiveness and cost-effectiveness, and combining this in an integrated model with necessity of treatment as a moderating factor.

Empirical Evidence

Effectiveness

In evidence-based medicine, the highest level of evidence is achieved when empirical studies, preferably randomized clinical trials, can be combined in systematic literature reviews and metaanalyses. The evidence on the effectiveness of psychotherapy for personality disorders is evolving in that direction. In the last decade, 2 metaanalyses, 6 reviews, and 1 Cochrane review have been published.^{1,4-11}

The available evidence clearly presents favourable results for the effectiveness of psychotherapy for personality disorders, notably borderline and avoidant personality disorders. The first metaanalysis, published by Perry and colleagues,⁷ shows that the effect size of psychotherapy for personality disorders is 1.1 to 1.3, against 0.25 to 0.5 for various control conditions, such as waiting lists or treatment as usual. This result is encouraging, as an effect size of 0.8 or higher is considered large.¹² The authors also analyzed the relation between treatment duration and recovery in 4 studies, and reported a strong dose-effect relation. After 1.3 years of outpatient psychotherapy (1 or 2 sessions per week), an average of 52% of patients no longer met criteria for the diagnosis of personality disorder. By modelling both recovery with treatment and natural recovery, they estimated that treatment is associated with up to 7 times faster recovery than the natural course of personality disorder.⁷

The second metaanalysis¹ describes the effects of cognitive-behavioural therapy and psychodynamic therapy for personality disorders and shows that both therapies lead to a significant decrease of symptoms. The average effect size for different outcome parameters is 1.5 for psychodynamic therapy and 1.0 for cognitive-behavioural therapy. Of the patients in psychodynamic therapy, 59% no longer met criteria for the

diagnosis of personality disorder after treatment. In the cognitive-behavioural therapy group, this figure was 47%. The difference between these 2 results must be interpreted with caution because the recovery figures are based on a small number of studies and the 2 therapies are not easily comparable, owing to different treatment durations. Nevertheless, an important conclusion from this metaanalysis is that psychotherapy not only reduces psychiatric symptoms, it also has a strong effect on personality pathology as well.¹

Recent evidence seems to confirm the results of the metaanalysis, showing that psychotherapy is a valuable treatment for patients with personality disorder.¹³⁻²¹ Further, Binks and colleagues¹¹ published a Cochrane review on psychosocial interventions for patients with borderline personality disorder, establishing the value of psychotherapy for this patient group on the highest scientific level. Their evidence suggests that with the help of psychosocial therapies patients show improvement in self-harm and parasuicidal behaviour, which are specific problem areas of borderline personality disorder. The investigated therapies are still experimental and the number of studies is still too small; therefore, they concluded that their findings should be replicated in larger real-world studies.¹¹ Nevertheless, these results are an important step in establishing a firm base of knowledge for the effects of psychotherapy for personality disorders.

Cost-Effectiveness

Although the evidence on cost-effectiveness of psychotherapy for personality disorders is still limited, we can draw some preliminary conclusions from the existing data. For instance, several cost-benefit studies provide arguments in favour of reimbursing psychotherapy for patients with personality disorder. For that particular patient population, these studies indicate that psychotherapy can lead to significant reductions in the use of other (mental) health care services and, therefore, has the potential to reduce health care costs.²²⁻²⁶ For example, Stevenson and Meares²⁴ have shown that the costs for hospitalization in 30 patients with borderline personality disorder are reduced significantly following outpatient psychotherapy for 12 months. Their calculations indicate that psychotherapy renders savings of \$8433 per patient in the first year after treatment. For 24 patients with personality disorder, Dolan and colleagues²⁵ showed that costs on psychiatric care and imprisonment decrease after treatment. They even argued that, if the patients' recovery continues, the treatment costs of psychotherapy would not only be paid back by the savings achieved through therapy but also lead to additional savings after 2 years. Gabbard and colleagues²⁶ conducted a review of the published evidence on costs and reductions through psychotherapeutic treatment for personality disorders. They concluded that the total direct medical costs of psychotherapy

are negative; accordingly, psychotherapy would not lead to expenditures, but to savings.

The studies mentioned above mainly focused on direct (medical) costs. But psychotherapy for personality disorders can also lead to a reduction in indirect costs, such as productivity losses caused by absenteeism, for instance. There is evidence to support this. Stevenson and Meares²⁷ found that psychotherapy reduces absenteeism from work among patients with personality disorder from an average of 4.7 to 1.4 months per year. In a follow-up after 5 years, this reduction was still evident.

A shortcoming of the studies published so far is that they cannot be classified as formal cost-effectiveness analyses. A lot of studies used tariffs as a proxy for costs instead of estimates of the true (direct and indirect) costs. Moreover, costs are usually presented out of context and are not explicitly related to the effects in a standardized cost-effectiveness ratio. However, this shortcoming does not necessarily jeopardize the evidence that for severe personality disorders, especially borderline personality disorder, psychotherapy saves medical as well as work-related costs.

Discussion

Given the evidence regarding effectiveness and the preliminary—but nevertheless favourable—cost estimates of psychotherapy for personality disorders, the question arises, Why the reluctance to fully deploy psychotherapy as a treatment of choice for personality disorders and encourage its reimbursement? We will discuss 3 important obstacles for that deployment and ways to overcome them. The first obstacle is the interaction between cost-effectiveness and (or) effectiveness and necessity, which is not yet fully recognized by the field. The second obstacle is the ongoing discussion about necessity of treatment. The third obstacle consists of still existing gaps in the evidence of effectiveness, cost-effectiveness, and the assessment of necessity.

Necessity—The Missing Link Between Cost-Effectiveness and Reimbursement

Cost-effectiveness and (or) effectiveness is often proclaimed as the ultimate criterion for the value of a certain treatment, but it is not the only important factor in the reimbursement discussion. It is a fact that not all cost-effective interventions are reimbursed and some very expensive treatments with a low effectiveness are nevertheless reimbursed. A stereotypical example of this is the reluctance to reimburse Viagra with its eminent cost-effectiveness ratio, while lung transplantation is usually reimbursed in spite of high costs and low effectiveness.²⁸ Obviously, factors other than cost-effectiveness play an important role in reimbursement policy. One of the identified factors is necessity of treatment. That is, the high need of

patients assigned to lung transplantation actually gives rise to favourable sentiments in the reimbursement decision process, while the burden of erectile dysfunction in elderly men is not considered decisive. This means we should appreciate evidence about cost-effectiveness and necessity of treatment in a broader perspective. This integrated perspective is well recognized in health economics and is called the equity debate. In this equity debate, health economists discuss how efficiency should be traded off with solidarity toward the patients most in need, meaning a trade-off between cost-effectiveness and necessity of treatment. One could take an egalitarian point of view and argue that all resources should be allocated to patients most in need. One could also take a utilitarian point of view, arguing that health care resources should be spent efficiently to do as much good as possible, meaning we should spend the limited budget on interventions proven to be most effective. In practice, most people take an in-between position: we feel solidarity with patients most in need while at the same time we feel that interventions should be distributed efficiently. Consequently, if one proves that a treatment option represents an efficient remedy for patients high in need, chances for reimbursement increase. If our field were to present such evidence convincingly, the status of psychotherapy in personality disorder would be strengthened and reimbursement would be facilitated.

Burden of Disease—The Missing Proof for Necessity of Treatment

The necessity of treatment for patients in psychotherapy still is a matter of debate. This is not just a popular belief. Even health policy-makers and clinicians tend to refer to patients in psychotherapy as YAVIS-patients. YAVIS is an acronym for young, attractive, verbal, intelligent, and successful, labelling patients who would benefit the most from psychotherapy. It is a common idea that psychotherapists prefer to help YAVIS-patients,²⁹ that is, patients with a low burden of disease and thus a low necessity of treatment. Normally in health care, a high burden of disease is associated with a greater need for treatment—and more willingness to allocate financial resources.³⁰ Consequently, proving a high burden of disease gives access to resources.

In the field of psychotherapy, efforts to contradict the YAVIS assumption so far have failed. In general, studies use indicators of suffering that are most often only meaningful inside their own scientific community. Researchers in personality disorders are tempted to choose outcome measures as ego strength, defence style, and borderline personality disorder severity. This may be meaningful within the field of personality disorders, but these concepts do not present a reference point for comparing the suffering of personality disorder patients to the suffering of somatic patients, for instance. Whenever treatments for personality disorders are competing

for resources with treatments for somatic illnesses, the undetermined necessity of treatment pushes psychotherapy into a defensive position.

What is needed are indicators of suffering in personality disorder that are widely accepted in health policy. Such an unequivocal estimation of the necessity of treatment for personality disorders is only possible when measuring the burden of disease with generic measures, focusing on quality of life. Only then it is possible to relate the burden of disease of personality disorders to that of other mental and somatic disorders. Among the first to choose this approach were the investigators of the Dutch Standard Evaluation Project, who used the generic EuroQol EQ-5D³¹ in a large sample of patients admitted to specialized units providing psychotherapy. This study shows that those patients having severe personality problems and disorders experience a high burden of disease.³² A limitation of this study was the lack of standardized diagnoses. However, the findings were replicated in a large multicentre trial showing that the quality of life in patients with standardized diagnoses of personality disorders can be compared with the quality of life in patients with chronic diseases such as rheumatic disease, Parkinson disease, or even lung cancer. The burden of having a personality disorder was found to be even higher than in patients with type II diabetes and HIV-infected patients.³³ These results are also in line with other studies showing that patients with personality disorder have a low global level of functioning.^{34–37} In one of these studies, Skodol and colleagues³⁵ compared psychosocial functioning in patients with schizotypal, borderline, avoidant, and obsessive–compulsive personality disorder to that of patients with mood disorder who have a global level of functioning comparable to patients with chronic diseases such as diabetes or arthritis.^{38,39} The results indicated that patients with schizotypal or borderline personality disorder have even lower psychosocial functioning than patients with mood disorder. In a general psychiatric population, Nakao and colleagues³⁴ reported a strong association between the number of criteria from DSM-IV Axis II⁴⁰ and the degree of functional impairment ($r = 0.60$, $P < 0.01$). Moreover, Verheul and colleagues⁴¹ showed that the relation between personality pathology and global functioning is not (fully) accounted for by Axis I comorbidity. Although these studies used intermediate outcomes (such as psychological variables instead of quality of life) to measure the burden of disease, they suggest that personality disorders are indeed specifically associated with a high burden of disease and, thus, a high necessity of treatment.

Gaps in the Evidence—The Missing Research

The third obstacle is the existence of gaps in the integrated evidence of effectiveness, cost-effectiveness, and necessity.

Increasing the Quality Standards of Psychotherapy Research.

The favourable results presented by the reviews and metaanalyses so far did not improve the deployment of psychotherapy in personality disorders and its reimbursement. One explanation is that the reviews discussed do not live up to modern scientific standards, most notably Cochrane reviews. Binks and colleagues¹¹ recently conducted such a Cochrane review and found preliminary but encouraging results for psychotherapy in personality disorders. It should be noted that most Cochrane reviews are extremely critical toward accepted standards in medicine, as they rely heavily on high-quality randomized trials, which are still scarce in long-term psychotherapy. Nevertheless, by introducing Cochrane standards in the treatment of personality disorders, the authors set an important trend. The investigation of Binks should be considered a sign of a maturing science. Such maturation will strengthen the empirical base of psychotherapy and will enhance its chances in guideline discussions and reimbursement policy. It would be naive to assume that psychotherapy will ever be fully deployed if the scientific and clinical community does not adopt modern scientific standards. To keep the field of psychotherapy in line with the rest of the medical world, high-quality effectiveness studies, covering the broad spectrum of personality disorders, should be introduced urgently.

From Efficacy to Effectiveness. When reporting results on the effectiveness of psychotherapy, a critical remark has to be made concerning the distinction between efficacy and effectiveness.⁴² Many studies pretending to prove effectiveness of psychotherapy are conducted with highly selected patients and treatments in academic treatment settings and well-trained and supervised therapists, making a generalization of the results to the general patient population difficult. In fact, these studies are efficacy studies, answering the question, Does this treatment work in a well-controlled environment? However, in health care policy, the most important question to be answered is, Does this treatment work in everyday practice?⁴³ This question can be answered by true effectiveness studies, investigating the effect of interventions done by ordinary practitioners, without extensive training and supervision, given to ordinary patients usually seen in clinical practice (for example^{20,44}). In the aforementioned metaanalyses, for example, this distinction is not clearly made. While both efficacy and effectiveness studies are important to strengthen the status of psychotherapy for patients with personality disorder, there is a clear need of well-designed effectiveness studies to demonstrate the value of psychotherapy in regular clinical practice.

Dose–Effect Relations. In effectiveness research, much effort is put into proving the superiority of one theoretical orientation over another. Despite all the effort and enthusiasm

involved, most of the time little difference is found between psychotherapies from different theoretical orientations (for example¹⁸). Typically, these results stem from research in which treatment dosage (number of sessions or days of treatment) is kept constant. But dosage in fact matters. Several researchers have found a positive relation between treatment duration (number of therapy sessions) and health improvements or recovery of personality pathology.^{7,45,46} This was confirmed by a randomized trial on the effectiveness of day hospital treatment of borderline patients. Treatment results take time. A clear reduction of symptoms and maladaptive behaviour, as well as improved social functioning, did not appear before 6 months of treatment.⁴⁷ A significant reduction of care requirement only appeared after 12 months of treatment and the improvements grew over the course of an 18-month follow-up care period.⁴⁸ These findings suggest that more progress will be found in dose–effect studies than in comparing rivaling theoretical orientations.

Sophisticated evidence about dose–effect relations in psychotherapy will give psychotherapists the evidence they need to counter the modern trend of short therapies. Of course new evidence has to be firm and has to include cost-effectiveness research. High doses (and thus high costs) are not necessarily a problem if a high dosage has a stronger effect. An example of this approach is the study by Beecham and colleagues,⁴⁹ showing a clear advantage of a step-down treatment program compared to a fixed long-term inpatient stay. Nevertheless, there is still much to be learned about dose–effect relations, especially in inpatient and day hospital settings. This is important because sound dose–effect data might serve as a powerful argument to endorse psychotherapy for personality disorders.

Effective Ingredients of Psychotherapy. There are many forms of therapy, all with their merits. Hence, the question is, What makes each therapy work? This quest is comparable with the search for the active substance in pharmacy. Despite the success of the search for the active substance in our neighbouring field of science, this knowledge gap still exists in psychotherapy. One exception is the relationship between therapist and patient, which is generally considered an established, major determinant of the effect of psychotherapy.⁵⁰ But next to relationship factors, there are other important ingredients of psychotherapy that might be crucial. That is why researchers get more and more interested in therapy factors such as degree of structure and clear focus of treatment, coherence of therapeutic framework, and integration with other patient services,⁴ as well as global principles of change.⁵¹ If it would indeed be possible to identify the active substance in psychotherapy, it might be possible to isolate it from other—possibly expensive—components of therapy. As such, the search for the effective factors in psychotherapy

represents an effort to increase both effectiveness and cost-effectiveness.

Formal Cost-Effectiveness Research. Formal cost-effectiveness research explicitly studies the relation between costs and effects. High costs of a treatment are not necessarily a problem as long as the effects are substantial. In a literature search, we identified promising book titles, such as *Efficacy and Cost-Effectiveness of Psychotherapy*⁵² and *Cost-Effectiveness of Psychotherapy*.⁵³ However, these studies present cost data but fail to establish a meaningful relation between cost parameters and effects. It would be more justified to classify these studies as cost studies or cost-minimization studies.

Recently, an extensive report was published in which the available evidence on cost-effectiveness of psychological therapies for borderline personality disorder, including dialectical behaviour therapy, was reviewed systematically.⁵⁴ The review team did an excellent job in performing separate economic evaluations for the 6 randomized controlled trials identified in their review of published studies. Cost-effectiveness was assessed in terms of costs per avoided parasuicide event (in all 6 trials) and costs per Quality Adjusted Life Year (QALY)⁵⁵ (in 4 of the 6 trials). The outcome could not provide a convincing conclusion, owing to the poor quality of the original studies, a mixture of methods to assess outcome, and a doubtful generalizability. Nevertheless, the results suggest that such interventions have the potential to be cost-effective. The authors use the results of their study to stress the need for high-quality cost-effectiveness research in which a meaningful cost-effectiveness ratio can be calculated, preferably in general terms such as costs per QALY.

In addition, future cost-effectiveness research has to include both direct and indirect costs caused by the illness and saved by certain treatments. This is especially true for work-related costs caused by educational delay, absenteeism, and presenteeism, the latter describing the behaviour of people who, despite serious complaints and ill health, still turn up at their jobs.⁵⁶ If formal cost-effectiveness studies of psychotherapy indeed show results comparable to already reimbursed treatments for somatic disorders, psychotherapists would have a strong and formal argument to plea for reimbursement of their therapy.

Proof of the Necessity of Treatment. We argued that generic instruments measuring quality of life, such as the EuroQol EQ-5D,³¹ are good choices as these instruments can compare the suffering of patients with personality disorder with the suffering of patients with well-known (somatic) illnesses. The findings of Soeteman and colleagues³² must be seen as a first effort to contradict the persistent belief that psychotherapy

patients experience a low burden of disease. We argue that psychotherapists should challenge the YAVIS belief in a convincing empirical way, otherwise the YAVIS sentiment will jeopardize any claim for reimbursement of psychotherapy in patients with personality disorder. Additional evidence using quality of life assessments and standardized diagnoses are needed to provide the decisive evidence.

Conclusion

Psychotherapy has the potential to develop into an evidence-based field, broadly accepted and widely reimbursed health discipline if innovative and comprehensive research on effectiveness, cost-effectiveness, and necessity of treatment is initiated. By working closely together, research and practice can provide efficient and equitable mental health care for patients in need.

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Résumé : Renforcement du statut de la psychothérapie pour les troubles de la personnalité : une perspective intégrée des effets et des coûts

Objectif : Malgré les données probantes scientifiques de son efficacité, la psychothérapie pour les troubles de la personnalité n'est pas encore pleinement utilisée, et son remboursement ne va pas de soi. Tant les cliniciens que les décideurs des soins de santé se fient de plus en plus à la médecine fondée sur les données probantes et à l'économie de la santé pour déterminer un traitement de choix et le remboursement. Cet article vise à contribuer à ce processus en appliquant ces critères à la psychothérapie comme traitement pour les patients souffrant d'un trouble de la personnalité.

Méthode : Nous avons évalué les données probantes empiriques disponibles sur l'efficacité et la rentabilité, et les avons intégrées avec la « nécessité de traitement » comme facteur modérateur.

Résultats : L'efficacité de la psychothérapie pour les troubles de la personnalité est bien documentée par des résultats favorables d'essais randomisés, 2 méta-analyses, et une revue Cochrane. Toutefois, les données probantes ne satisfont pas encore tout à fait aux normes modernes de la médecine fondée sur les données probantes, et se limitent pour la plupart au trouble de la personnalité limite et évitante. Les données sur la rentabilité suggèrent que la psychothérapie pour les troubles de la personnalité pourrait entraîner des coûts réduits. Cependant, les données actuelles sur la rentabilité sont encore rares. Un facteur encourageant est que les études disponibles indiquent que les patients souffrant d'un trouble de la personnalité ont un fardeau élevé de maladies, soulignant la nécessité d'un traitement.

Conclusions : Lorsqu'on applique une vision intégrée au résultat, la psychothérapie peut être considérée non seulement comme un traitement efficace pour les patients souffrant d'un trouble de la personnalité, mais aussi fort probablement comme une intervention rentable et nécessaire. Cependant, il faut plus de recherche de pointe avant que les cliniciens et les décideurs des soins de santé ne puissent pleinement apprécier les avantages de la psychothérapie pour les troubles de la personnalité. Des progrès considérables sont possibles si les chercheurs concentrent leurs efforts sur la médecine fondée sur les données probantes et la recherche sur la rentabilité.