COMPLEXITY

CONTINUUM SERIES – IRELAND
CONTINUUM SERIES – COMPLEXITY

COMPLEXITY
IRELAND

CONTENTS

1.0 Refining the blend of factors that influence treatment decisions
2.0 The professional relationship
3.0 Shared clinical decision making
4.0 Risky business
5.0 In conclusion

OVERVIEW

Dental Protection’s Continuum series of Advice Booklets forms part of our commitment to assist and support members every step of the way from student to graduate, from the early years of professional life on to safely negotiating the many challenges that can arise at critical moments throughout a professional career, and helping them through to a happy and worry-free retirement (and beyond). In particular we aim to make members aware of the dentolegal pitfalls associated with all these critical moments, so that they are more able to cope with them at a personal level and to manage them safely and successfully in a professional sense.
REFINING THE BLEND OF FACTORS THAT INFLUENCE TREATMENT DECISIONS

As clinicians, we are not machines and our patients’ biological responses to treatments are not always predictable. Add to this, any financial constraints and differences of opinion about best practice and there are all the making of a rare blend of complexity.

Complexity (in the clinical sense) relies on known interventions that (mostly) lead to known outcomes. That said, experience tells us that the biological response to treatment is not always predictable – and so things do not work out as we may have hoped. This is because we are not mechanical constructions and biological systems are adaptive – a situation that leads to variation in outcome.

Just as biological systems adapt, clinicians also find they adapting in response to politically created systems and the boundaries caused by business constraints. A dentist today has to manage the clinical complexity associated with caring for the patient and the complex adaptive elements within the environment, all of which are interconnected. It is this latter aspect that is the essence of scientific theory about complexity (see Figure 1).

In the clinic...

Complexity in a clinical context can arise in a variety of situations:

- A less than straightforward case
- Multi-disciplinary treatment
- Clinically challenging treatments or situations.

The term ‘complex’ is used as a comparator for a particular clinical discipline, and suggests the involvement of specialists or experienced clinicians. It demands a well-constructed treatment plan and is likely to be staged with some contingency planning for failure.

Figure 1. The inter-dependency of elements that create complexity
SIMPLE ENOUGH?

A simple clinical procedure can be complex because of peripheral interactions. For example, the provision of a composite restoration for a chipped central incisor is a simple enough procedure. There may be clinical complexity associated with the occlusion, but most clinicians would agree it is not a demanding task in the way placing an implant might be. But, there are still choices to be made – regarding materials, techniques and costs. There are also time constraints to consider, particularly when the treatment is provided under a system with boundaries as in some managed care systems. The patients cannot – and must not – be misled about the quality of treatment, but there are still different materials and techniques to consider and some may not be feasible under the constraints of a managed care system. The dentist’s preference and experience will come into the equation, so too the patient’s choice and preference.

VARIABLES AND BEHAVIOURS

In his book, Simplexity, Jeffrey Kluger writes: ‘Complexity, as any scientist will tell you, is a slippery idea... things that seem complicated can be preposterously simple; things that seem simple can be dizzyingly complex...’

This Continuum booklet aims to explore some of the complexities associated with clinical decision making and the dentolegal implications. It looks at the challenges in clinical practice over and above the technical expertise needed to provide care. It also considers how all the variables and behaviours that increase risk and uncertainty in the clinical setting may work together to lead to complaints. In our experience at Dental Protection, a significant number of cases arise because certain treatment outcomes did not meet the patient’s expectations. Alternatively, they occur where the patient has not been adequately informed about the treatment – and their consent not obtained. In addition, many patients report they were not involved in the decision-making process or, worse, felt they were misled or misinformed about the treatment they received. This data highlights the complexities of clinical decision making and the importance of co-diagnosis and managing the overall patient experience.

Questions, questions

- What if the patient asks for the ‘best’ material available to restore an anterior tooth?
- Is there a ‘best’ material and, if there is, then is it available?
- What if it is not?
- Is the best material available?
- What about the relevance of a clinician’s experience in working with the ‘best’ material and his or her understanding of how it should be used in layering techniques?
- Does this lack of knowledge then limit the patient’s choice?

It’s history!

Historically, the dentist-patient relationship has been paternalistic, with clinical interventions largely determined by the practitioner on a cause-and-effect basis. Clinical interventions were little more than technical fixes, delivered to the patient in a ‘dentist knows best’ culture. It was a reductionist philosophy with no place in today’s world of patient-centred care, choice and shared decision making. In short, autonomous patients are ‘choosers who act intentionally, with understanding, and without controlling influences that determine their actions.’ (Stigglebout, J Med Ethics 2004;30:268-274 doi:10.1136/jme.2003.003095).

A dentist who continues to adopt a paternalistic point of view runs the risk of complaints, possible litigation and an investigation by the regulator.
2.0 THE PROFESSIONAL RELATIONSHIP

The business environment places pressures on individuals that may influence behaviours and call into question the honesty and integrity of the practitioner. To quote Michael Wieber, writing in the Journal of the Canadian Dental Association: ‘The private practitioner surviving on elective services is torn between the patient-first ethos of the healer and the survival-of-the-fittest demands of private enterprise’ (2001).

The dentist-patient relationship is built on trust. In terms of the business economy, dentistry is described as a credence purchase. In his paper, Credence Goods and Fraudulent Experts, Winand Emons discusses the ‘information asymmetry’ that exists between buyer and seller where the seller is an expert in the field and the buyer knows little which ‘creates strong incentives for opportunistic seller behaviour’. His solution to the dilemma is the ‘separation of diagnosis and treatment’. He cites the example of an ‘expert’ who examines a product and then knows the condition of that product. The expert can make one of two decisions. If the examined product is in good shape, then no repair is necessary and the expert can recommend no intervention or recommend an intervention (which is not needed). If the examined product is faulty, the expert can suggest a repair or state that no intervention is necessary. In both scenarios, the second recommendation is bias and the consumer may have no idea about this bias. To use Emons’ words, ‘the consumer has no way of finding out whether his product was repaired unnecessarily or it needed treatment that was not provided’. It may seem to the reader that to look at dentistry through this economic lens is an artificial construction, but it is worth noting that much of the empirical evidence in economic literature that relates to credence goods is based on the markets for car repairs and healthcare services with studies to support the association.

PATIENTS FIRST

The Dental Council – whose purpose is to protect patients – states in its Code of Practice relating to: Professional Behaviour and Ethical Conduct you must try to care and treat all patients and always act in their best interest (3.2).

Additionally you should never knowingly give false, incorrect or misleading information to a patient it is important to reassess the decision process to ensure that patients are fully informed, knowledgeable and wholly involved in their care. This is achieved through a process of shared decision making.
3.0 SHARED CLINICAL DECISION MAKING

Shared decision making (SDM) has been defined as: ‘An approach where clinicians and patients share the best available evidence when faced with the task of making decisions, and where patients are supported to consider options, to achieve informed preferences.’ Another definition is offered by Standing (2011) - ‘Clinical decision making applies clinical judgement to select the best possible evidence-based options to control risks and address patient’s needs in high quality care for which you are accountable.’ It adds the dimension of ‘accountability’ to the first definition. It is this accountability that raises the spectre of risk in everyday practice.

Four key components of SDM

1. The use of professional judgement
2. The use of current information sources (evidence)
3. Choices are made about what, who, when and why things are done (options), evaluating the choices that are made (selection)
4. Accountability for those decisions.
5. Plus, we can add a fifth component that applies in a general practice setting – cost!

Each intervention is associated with risks and benefits but also has financial implications for patients who pay for treatment. It is a common finding in complaints – or claims for compensation – that an intervention is questioned or challenged by a patient on grounds of cost rather than clinical effectiveness. Further inquiry or investigation may then reveal ethical breaches in the decision making process.

Ask yourself these questions

1. Are we doing things in the right way?
2. What is the evidence relating to our prescribing preferences?
3. Is the clinical care and treatment that we are providing effective?
4. How can we ensure that necessary changes are put into clinical practice?

Exploring and respecting ‘what matters most’ to our patients as individuals should influence clinical decisions. Writing in the Journal of the American Dental Association in 2004, Ismail and Bader advised that: ‘In developing appropriate treatment plans, dentists should combine the patient’s treatment needs and preferences with the best available scientific evidence, in conjunction with the dentist’s clinical expertise. To keep pace with other health professions in building a strong evidence-based foundation, dentistry will require significant investments in clinical research and education to evaluate the best currently available evidence in dentistry and to identify new information needed to help dentists provide optimal care to patients.’

It is reliant on:

- Pattern recognition through experience
- Critical thinking and understanding causal relationships
- Effective communication
- Adopting an evidence-based approaches
- Critical reflection.

Variation in clinical decision making and interventions has been identified in many studies. It is attributed to:

- Ambiguity of clinical data
- Variations in its interpretation
- Uncertainty about relations between clinical information and presence of disease
- Uncertainty about effects of treatment.

In their paper, Shared decision making: A Model for Clinical Practice, Elwyn, Frosch and Barry propose a three-step model where the clinician supports the patient in their deliberation. Figure 2 (overleaf) summarises the approach.

The stages are fluid and there may be cases where a step has to be re-visited. In general terms, the more complex the intervention, the more in-depth the discussions required to be sure a patient is able to give valid consent. If the patient is unsure, a deferred closure is preferable to forcing a decision immediately. Studies show shared decision making has a positive effect on satisfaction and the perceived quality of outcomes (see Figure 3 overleaf).

A scrutiny of files, relating to claims and complaints against members, confirms Robert Bunting’s observation that the existence of so-called predisposing factors such as rudeness, poor inter-personal relationships, inadequate communication and inattentiveness will often motivate patients to sue or complain when there are precipitating events such as patient harm, adverse outcome or iatrogenic injury during clinical procedures.
Figure 2. A model for clinical practice

**Choice Talk**
- reasonable options explained
- justify choice
- check patient reaction

**Option talk**
- more detailed information of the options
- risks and benefits
- check knowledge
- summarise

**Decision talk**
- supporting the patient in considering the options
- elicit preferences
- make a decision
- offer review

Figure 3. Shared decision making

Complaint motivators
- Rudeness
- Poor inter-personal relationships
- Inadequate communication
- Inattentiveness

“Studies show that shared decision making has a positive effect on satisfaction and the perceived quality of outcomes”
TAKE THE TEST!

All clinicians from the outset of their career must develop the skills needed for shared decision making. Dentists must believe in the principle of self-determination and buy into the ethical principles that underpin the required skill set. This can be seen from the dentolegal case experience where dentists have suggested, in their defence of an allegation, that the patient:

- Did not want to be involved in the decision
- Lacked capacity to make an informed decision
- Would be unable to digest information too complex to relay
- Has low literacy in dental matters.

The irony of the dentist’s allegation is that, frequently, it is this very disengagement that sparks the complaint in the first place. The American College of Dentists advocates an ethical decision-making test based on a series of questions under three headings:

- Assessment
- Communication
- Decision.

The ACD test (as it is known) is summarised in Figure 4. It is a practical test that can be used in everyday practice to inform ethical decision-making.

Figure 4. The ACD Test
Minimally invasive interventions are less likely to lead to complaints and litigation compared to more destructive and/or elective options such as invasive cosmetic dentistry. One approach to identify the generic risk areas is to adopt and adapt Ralph Stacey’s agreement/certainty matrix (see Figure 5). Ralph Stacey is professor of management at the University of Hertfordshire. His matrix relates the two dimensions of certainty of outcome and extent of agreement. In the context of general practice, we can consider clinical outcomes and the extent to which a group of professionals (a respected body of opinion) would agree on a particular intervention for a given diagnosis.

**THE DILEMMA**

A patient requires some bridgework that is to be provided under a private insurance scheme. The standard of work the clinician demands is only attainable from a laboratory where the laboratory fee will exceed the payment made by the NHS. There is a financial constraint in the system. If the clinician provides a bridge – but not to the required standard to save on laboratory costs – then s/he breaches the Dental Council Code because s/he is acting in his/her own interests rather than those of the patient. If the clinician goes ahead and provides the bridge, s/he will incur a financial loss and repeated exposure to this dilemma may undermine the long-term viability of the business.

So, what is the correct decision? Is there a solution? This is the zone of complexity because different agencies will take a different view and there is unlikely to be universal agreement amongst stakeholders. Decisions in this zone are difficult and are irreducible to the simplicity of linear relationships. It is because of this that a significant proportion of complaints find their way to Regulators around the World because the complexity of the situation and the inter-dependency of the elements can call into question a registrant’s conduct.

---

**Figure 5. Stacey’s matrix and risk zones**

Zone 1 is predictable and low risk. This is the comfort zone where the intervention is well supported by evidence and there would be universal agreement amongst professionals about its appropriateness. If challenged, there would be professional consensus and support of our actions. Clinical protocols will exist.

Zone 2 introduces political bias where there may be disagreement amongst policy makers and differences in opinion between different stakeholders. In zone 3, clinicians exercise their judgement based on experiential learning.

Zone 3 introduces complexity where treatment options and outcomes are not as predictable and where there may be scope for differences in clinical opinion and outcomes. This zone poses some risks but not to the extent of those in zone 5 where interventions may be considered fringe or bordering on quackery.

Zone 4 occupies the greatest space in the matrix and poses the greatest challenge because there may be difference of opinions amongst professionals and/or system constraints that direct a clinician away from the safer zone. The optimum intervention may not be achievable because of financial constraints that may be at system level or at patient level. This context creates challenges for the clinician and adds further complexity to the mix.

Zone 5 presents the greatest hazard any treatment in this zone that comes under scrutiny in this zone is highly likely to lead to dentist-patient disputes and inter-professional criticism.
Providing high quality dentistry for a patient can be simple or complicated. Both take place in a complex environment that has a significant impact on clinical decision making. Patient involvement in the process is very important to ensure care is delivered in a way patients know to be in their best interests. The complexities of working in a third-party payment system, personal bias, constraints that may be imposed by the business, patient demands, choice and availability of resources, varying competencies amongst clinicians all create an inter-dependency that can significantly lead to sub-optimal care. By identifying – and then controlling – the factors, and adopting an ethics-led approach to care, we can control and manage that risk.

**ALWAYS REMEMBER!**
- Any decision a clinician must resolve has to be done with the patient’s best interests in mind
- When making clinical decisions, co-diagnosis and management of the overall patient experience are key factors
- The relationship between clinician and patient is founded on trust
- An allegation of misleading a patient is frequently considered by a dental Regulator as amounting to an allegation of dishonesty
- Shared decision making is important when reassessing the clinical decision process to ensure patients are fully informed, knowledgeable and wholly involved in their care
- Rudeness, poor inter-personal relationships, inadequate communication and inattentiveness will often motivate patients to sue or complain
- The more different the view from various agencies and bodies, the less likely there is to be universal agreement amongst stakeholders and, therefore, the riskier the treatment
- Use the processes outlined in Figures 2 and 4 frequently. They are useful, everyday tools to help manage risk in the surgery!

**Do you have?**
- Knowledge of current treatment protocols
- Understanding of the current evidence base for clinical interventions. Close adherence to this will keep clinical decisions within zone 1 of the Stacey matrix and minimise risk
- Ethical awareness to eliminate behavioural bias that creates much of the non-clinical complexity discussed in this booklet
- Effective communication skills to involve the patient in the decision making and facilitate the consent process.

The ACD test and the Choice, Option and Decision models illustrated here are useful everyday tools to facilitate this risk management process. The evidence for following this advice and guidance should appear in the form of detailed contemporaneous notes in the patient’s records. The greater the complexity, the more detail that is required in the clinical notes to ensure that third-party reading of the records reflects the detail of the discussions with the patient.