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- Making Change Happen -

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MAXIMISING 'TAKE UP':
FORMS OF IMPLEMENTATION FIDELITY

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INTRODUCTION

- Why are we concerned about implementation fidelity?

  Because, despite the proliferation of evidence-based programs and strategies, we are not getting the kind of results we would expect when we try to apply these strategies in real world settings.

- The assumption behind the implementation agenda is that, to get better results, we need to be much more thorough about ensuring that practitioners are able to deliver evidence-based programs faithfully and consistently.

- But what is evidence-based practice? And what does implementation fidelity involve?

REDEFINING EVIDENCE-BASED PRACTICE

Recently, there have been moves to redefine evidence-based practice in areas such as medicine, psychology and early childhood intervention

Evolving definitions of evidence-based medicine:

- 'Evidence-based practice is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients' (Sackett, Richardson, Rosenberg and Haynes, 1997)
- 'Evidence-based medicine is the integration of best research evidence with clinical expertise and patient values' (Sackett, Straus, Richardson, Rosenberg and Haynes, 2000)

REDEFINING EVIDENCE-BASED PRACTICE (cont)

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- By *best research evidence* we mean clinically relevant research, often from the basic sciences of medicine, but especially from patient-centered clinical research into the accuracy and precision of diagnostic tests (including the clinical examination), the power of prognostic markers, and the efficacy and safety of therapeutic, rehabilitatative, and preventive regimens.
- By *clinical expertise* we mean the ability to use clinical skills and past experience to rapidly identify each patient's unique health status and diagnosis, the individual risks and benefits of potential interventions, and their personal values and expectations.
- By *patient values* we mean the unique preferences, concerns and expectations each patient brings to a clinical encounter and which must be integrated into clinical decisions if they are to serve the patient.

REDEFINING EVIDENCE-BASED PRACTICE (cont)

When these three elements are integrated, clinicians and patients form of diagnostic and therapeutic alliance which optimises clinical outcomes and quality of life.

Sackett, Straus, Richardson, Rosenberg & Haynes (2000)

BEST AVAILABLE RESEARCH

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- The usual criteria for judging the quality of evidence give precedence to systematic reviews of randomised controlled trials, considered the ‘gold standard’ for identifying effective interventions

However, there are problems with this form of evidence

- We only know what we know, ie. we only have evidence from what has been studied, and not about the many strategies that have not been tested
- There are hundreds of manualised treatment programs and the number continues to grow – in fact, there are too many programs to be properly evaluated by anyone other than the program designers.
- Evidence-based programs must be delivered as designed, with little or no flexibility allowed – yet, as we shall see, flexibility would seem to be one of the key features of effective practice.

BEST AVAILABLE RESEARCH (cont)

- Once a particular program has proven to be effective, the program does not evolve – the programs that are most likely to be regarded as the most effective are often programs designed decades ago, based on the theories of the time and the needs and circumstances of the children and families – all of which have changed dramatically in recent years
- Systematic reviews of different forms of human services often fail to reach any useful conclusions about what works and what doesn't
- Even when systematic reviews identify programs that have been subjected to high quality trials and shown to be effective, these programs often account for only a small proportion of the variance in outcomes, ie. they are only modestly effective at best
- This was highlighted by a recent literature review conducted by our team at the Centre for Community Child Health on effective home visiting programs (McDonald et al., 2012)

BEST AVAILABLE RESEARCH (cont)

- Systematic reviews seek to remove all the variables practitioners are most interested in.
- In a provocatively titled opinion piece in the *British Journal of General Practice*, Trisha Greenhalgh (2012) asks 'Why are Cochrane reviews so boring?'

> The reason why Cochrane reviews are boring — and sometimes unimplementable in practice — is that the technical process of stripping away all but the bare bones of a focused experimental question removes what practitioners and policymakers most need to engage with: the messy context in which people get ill, seek health care (or not), receive and take treatment (or not), and change their behaviour (or not).

BEST AVAILABLE RESEARCH (cont)

- RCTs are not well suited to answering questions about human services that address complex problems – they are best at answering questions about the efficacy of interventions where we can control all the variables except the treatment variable.
- The standard hierarchies of evidence contain little or no reference to the two other elements now considered to be part of the definition of evidence-informed practice - clinical expertise and patient values.
- *Overall conclusion*: we cannot rely on evidence-based research alone in selecting intervention strategies, but must broaden the evidence basis on which we make decisions

PRACTICE-BASED EVIDENCE

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There are several different ways in which forms of practice-based evidence has been defined:

- Individual clinical expertise
- Collective practice wisdom
- Concurrent gathering of evidence during practice
- Effective processes of service delivery

EFFECTIVE PROCESSES OF SERVICE DELIVERY

- Another key aspect of effective service delivery that is not well addressed in the evidence-based paradigm concerns the *process* of service delivery, that is, the *manner* in which clients are engaged and services delivered.

Several different ways of identifying these processes have been developed:

- The *common factors approach* (Drisko, 2004; Duncan et al., 2010; Rosenszweig, 1936; Sprenkle et al., 2009)
- The *common elements approach* (Chorpita et al., 2005, 2007)
- *Features of effective help-giving* (Dunst & Trivette, 1996; Trivette & Dunst, 2007)
- *Practice-based syntheses* (Dunst et al., 2002; Dunst, 2009)
- *Evidence-based kernels* (Embry, 2004; Embry & Biglan, 2008)

PROGRAMS AND PROCESSES: THE 'WHAT ' AND THE 'HOW'

- In a recent literature review conducted for ARACY, my colleagues and I looked at the evidence regarding service delivery processes and strategies, and effective methods of engaging with vulnerable families that are associated with better outcomes for these families (Moore et al., 2012).
- This review complemented an earlier review (McDonald et al., 2012) that had looked at the evidence regarding the most effective *programs* for working with vulnerable families of young children.
- Our review of effective processes concluded that there is general support for the notion that process aspects of service delivery matter for outcomes.

PROCESSES AND PROGRAMS (cont)

- A number of key elements of effective service delivery processes have been repeatedly identified in the research literature: regardless of the focus or content of the intervention, effective programs
  - are relationship-based;
  - *involve partnerships between professionals and parents;*
  - target goals that parents see as important;
  - *provide parents with choices regarding strategies;*
  - build parental competencies;
  - *are non-stigmatising;*
  - demonstrate cultural awareness and sensitivity; and
  - *maintain continuity of care.*
- These process variables appear to be of particular importance for the most vulnerable families, who appear to be less likely to make use of professional services that do not possess these qualities.

HELPING FAMILIES: THRESHOLD FACTORS

- A review of the evidence regarding ways of preventing mental health problems of infants and toddlers (Barnes, 2003; Barnes & Freude-Lagevardi, 2003) concluded that there are a number of necessary, but not sufficient, factors associated with enhanced early intervention outcomes.
- They can be divided into
  - *primary (threshold)* factors that function in an all-or-nothing manner, and
  - *secondary (fine-tuning)* factors

THRESHOLD FACTORS (cont)

Primary (or threshold) factors:

- Shared decision-making between parent and therapist / intervenor
- *Quality of relationship between the parent and the intervenor*
- Non-stigmatising presentation of intervention
- *Cultural awareness / sensitivity*
- Flexible settings / hours
- *Crisis help prior to other intervention aims*

THRESHOLD FACTORS (cont)

Secondary (or fine-tuning) factors:

- Choice of theoretical model
- *Choice of timing of intervention*
- Choice of location to offer intervention — home, clinic or community location
- *Choice of intervenor — professional or paraprofessional*

The primary factors are mainly factors of participant perceptions and beliefs about the importance or potential benefits of the intervention and if these are not addressed then it will be difficult to achieve change in behaviour.

VALUES AND OUTCOMES

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- According to Sackett et al. (2000), *patient values* refer to the unique preferences, concerns and expectations each patient brings to a clinical encounter and which must be integrated into clinical decisions if they are to serve the patient.
- According to Thomas et al. (2010), 'Values-based care is a blending of the values of both the service user and the health and social care professional, thus creating a true, as opposed to a tokenistic, partnership.'
- There is consistent evidence that services are less effective if they do not address issues that clients see as important and if they do not use strategies that the clients are happy and able to use

VALUES AND OUTCOMES (cont)

- To successfully engage and strengthen families, it is critical that service providers identify and help families work towards outcomes that are valued by the families
- Of all the philosophical frameworks for working with families that have been developed, the one that best exemplifies this process is what is known as *family-centred practice* in early intervention and family support services and *family-centred care* in medical services.
- Recent literature reviews and meta-analyses of research across a wide range of medical and early intervention service sectors have consistently shown that family-centered practices have positive effects in a diverse array of child and family domains

FORMS OF FIDELITY

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- The expanded conceptualisation of evidence-based practice has led to it being renamed *evidence-informed practice*
- Evidence-informed practice contains three elements:

  - ***programs*** (evidence-based interventions),

  - ***processes*** (effective forms of service delivery), and

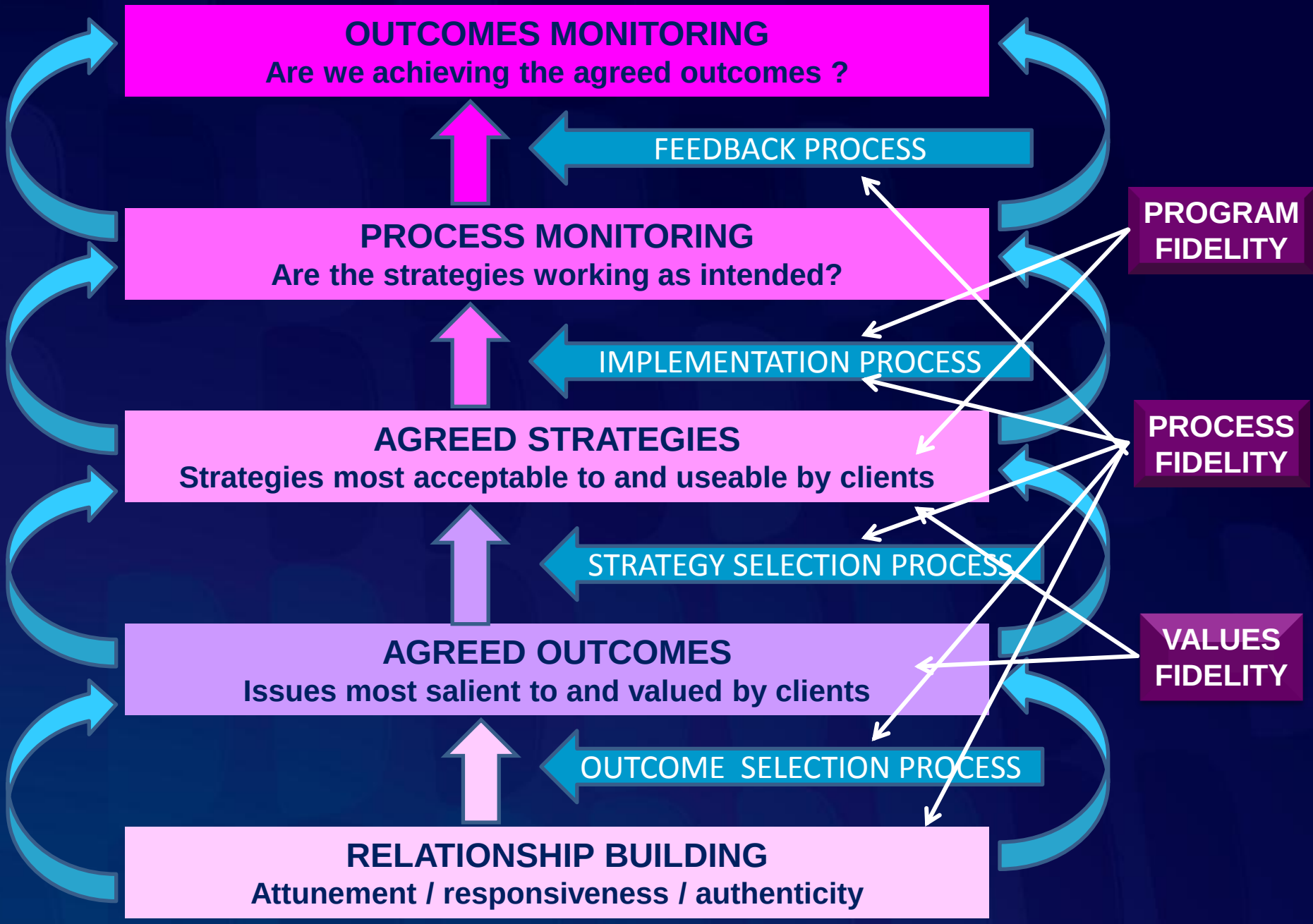
  - ***values*** (procedures and outcomes preferred by clients)

- Corresponding to the three components of evidence-based practice, there are three types of implementation fidelity to be considered: program fidelity, process fidelity and values fidelity.

FORMS OF FIDELITY (cont)

- ***Program fidelity*** is concerned with *what* is delivered, and with ensuring the faithful delivery of proven programs and strategies according to their original design.
- ***Process fidelity*** is concerned with *how* services are delivered, and ensuring that services are delivered in ways that are known to be effective in engaging and changing client behaviours.
- ***Values fidelity*** is concerned with ensuring that the focus of service and method of service delivery are consistent with client values and choices.

Each of these forms of fidelity can and should be measured constantly to ensure that help is implemented effectively.


OUTCOMES MONITORING
Are we achieving the agreed outcomes ?
FEEDBACK PROCESS
PROCESS MONITORING
Are the strategies working as intended?
IMPLEMENTATION PROCESS
AGREED STRATEGIES
Strategies most acceptable to and useable by clients
STRATEGY SELECTION PROCESS
AGREED OUTCOMES
Issues most salient to and valued by clients
OUTCOME SELECTION PROCESS
RELATIONSHIP BUILDING
Attunement / responsiveness / authenticity
PROGRAM FIDELITY
PROCESS FIDELITY
VALUES FIDELITY

FORMS OF FIDELITY (cont)

- This approach is significantly different to the approach to implementation proposed by Fixsen et al. (2005) or Wiggins et al. (2012).
- Their approach is to begin by selecting ‘the most appropriate program for a local area’ (Wiggins et al., 2012), then proceeding through a series of steps to train staff, developing organizational supports, monitoring progress, and evaluating program fidelity and outcomes.
- This is a top-down, professionally-driven approach that focuses principally on program fidelity, as opposed to the model outlined here that places equal emphasis on three forms of fidelity

ENSURING 'TAKE-UP'

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- The ultimate aim of effective implementation is helping clients / parents find solutions to the challenges that face them.
- The real issue we should be concerned with is the extent of ‘take-up’ by those we seek to support – that is, the extent to which clients / parents are able to make use of the support provided, and the extent to which that leads to actual changes in behaviour.
- By themselves, evidence-based programs, not matter how faithfully they are implemented, are not guaranteed to produce desirable changes in clients.
- To increase the chances of ‘take-up’, we need to use the three forms of implementation fidelity.

ENSURING ‘ TAKE-UP’ (cont)

Although we commonly assume that what therapists do is the most important element of therapy, it is in fact the clients who are the most important factor in the success or failure of therapy:

Clients are the ones who choose what to pay attention to and how to make it work. *(Sprenkle et al., 2008)*

Patients are not passive recipients waiting for doctors to make decisions about their health: the evidence suggests that the more actively patients participate in consultations, the better controlled are their chronic diseases. *(Sweeney et al., 1998)*

CONCLUSIONS

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- *Evidence-based practice* in its narrow form cannot provide us with the all the information we need to deliver effective services in real world settings
- Hence, implementation initiatives that are based on this paradigm and that focus principally on ensuring program fidelity are not likely to make a significant difference to service efficacy
- The broader notion of *evidence-informed practice* involves three elements – research-based evidence, practice-based evidence, and client values
- Effective service delivery involves three forms of fidelity, corresponding to these three elements

RESOURCES

The Royal Children's Hospital Melbourne

- McDonald, M., Moore, T.G. and Goldfeld (2012). **Sustained home visiting for vulnerable families and children: A literature review of effective programs.** Parkville, Victoria: The Royal Children's Hospital Centre for Community Child Health and the Murdoch Childrens Research Institute. http://www.rch.org.au/uploadedFiles/Main/Content/ccch/resources_and_publications/Home_visiting_lit_review_RAH_programs_final.pdf

- Moore, T.G, McDonald, M., Sanjeevan, S. and Price, A. (2012). **Sustained home visiting for vulnerable families and children: A literature review of effective processes and strategies.** Parkville Victoria: The Royal Children's Hospital Centre for Community Child Health and the Murdoch Childrens Research Institute. http://www.rch.org.au/uploadedFiles/Main/Content/ccch/resources_and_publications/Home_visiting_lit_review_RAH_processes_final.pdf

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