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When demand exceeds supply for psychotherapy: evaluation of the client priority rating scale (CPRS) as a triage protocol

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WHEN DEMAND EXCEEDS SUPPLY FOR PSYCHOTHERAPY: EVALUATION OF THE CLIENT PRIORITY RATING SCALE (CPRS) AS A TRIAGE PROTOCOL

A thesis submitted in partial fulfillment of the requirements for the award of the degree

Doctor of Psychology (Clinical)

at the

University of Wollongong

Carla Walton

Bachelor of Science (Psychology) UNSW

Department of Psychology

2003
I, Carla Joy Walton, declare that this thesis, submitted in partial fulfillment of the requirements for the award of Doctor of Psychology (Clinical), in the Department of Psychology, University of Wollongong, is wholly my own work unless otherwise referenced or acknowledged. The document has not been submitted for qualifications at any other academic institute.

Carla Joy Walton

13 May, 2003
RELEVANT PUBLICATIONS AND PAPERS PRESENTED IN THE COURSE OF CANDIDATURE

PEER REVIEW PUBLICATIONS


CONFERENCE PRESENTATIONS


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ABSTRACT

Whilst there has been much research conducted on triage in psychiatric inpatient emergency services, there has been very little conducted on triage for traditional outpatient psychotherapy services. Waiting lists for outpatient psychotherapy are common throughout public health services, and how to effectively and fairly determine priority remains a dilemma. This thesis set out to investigate a new method of psychotherapy triage using the Client Priority Rating Scale (CPRS). Specifically, the study aimed to evaluate the impact and effectiveness of the CPRS in terms of its reliability, utility and the characteristics of clients prioritised most highly for treatment. The CPRS requires clinicians to make weighted ratings in the domains of Suicidality, Severity of Presenting Problem, Strength of Internal Coping Resources, Availability of Interim Care Options and Possible Negative Impact of Waiting following an initial assessment interview. Scores are then summed and total scores can be used to prioritise waiting times for psychotherapy services.

Use of the CPRS was examined in a naturalistic setting with multi-diagnostic clients (n=68) and a standardised controlled setting with depressed clients (n=86). The CPRS was found to have good inter-rater agreement and consistency. As predicted, those with higher CPRS scores were significantly more likely to commence psychotherapy treatment before those with lower scores. CPRS score was found to be significantly related to diagnosis as well as social and psychological functioning such that those with a greater level of psychopathology were more likely to have been assigned higher priority scores. CPRS was also found to be significantly related to working alliance and outcome. In general, clients with lower CPRS scores had better outcomes than those with higher CPRS scores. Overall, the results of this study suggest that the
CPRS has utility as a method of triage to determine priority for clients seeking psychotherapy services.
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Chapter 1

INTRODUCTION

1.1 PLACING THE STUDY IN CONTEXT

When demand exceeds supply in psychotherapy services there are resultant long waiting lists and long waiting times. Currently, there are high prevalence rates of anxiety, mood and other disorders seen in primary care settings (White, 2000). In addition, with the greater emphasis on community integration and de-institutionalisation over the past few decades (Abbott et al., 1997) waiting lists in public sector community services have increased and clinicians have been left with the difficult and delicate situation of having to determine which clients on these lists are of the highest priority.

Often, these clients have severe and chronic psychiatric illnesses with primary diagnoses that are likely to be complicated by co morbidity with personality disorders, psychoactive drug/alcohol abuse disorders and/or physical illnesses (Abbott et al., 1997). As such, the typical referral for psychotherapy is more likely to be the ‘walking wounded’, than the ‘worried well’ (Aveline, 1995). Those in need most often cannot afford to pay for treatment in the private market, and hence they turn to the fairly limited resources in the public system (Fredelius, Sandell, & Lindqvist, 2002). Whilst there is a growing emphasis on delivering quality psychiatric services in a community context, the number of heavy service using clients placing demands on public sector services is also growing (Abbott et al., 1997).

To date, no modern industrialised society has succeeded in matching resources to need in such a way as to avoid rationing of health care (Cummings, Budman, & Thomas, 1998). All modern
societies use varying types and intensities of health care rationing simply because there are not
enough resources to meet the need and demand. In the current resource-strained environment,
some suggest that the mental health care system is susceptible to the worst in bureaucratic
infighting and efforts to shift costs to other sectors (Mechanic, 1996). As such, while mental
health advocates demand that mental health needs get more attention, policy makers must face
competing demands and tradeoffs within existing budgetary constraints. Accordingly, the
question arises as to how we should best and most fairly distribute scarce resources to different
groups of mental health clients.

Taking into consideration the high demand for psychotherapy services as well as the scarce
resources available, long waiting lists are inevitable. Procedural justice presupposes that
everyone should wait his or her turn. Yet, it is considered an unargued premise in the juridical
and ethical literature on patient selection criteria that those who are most urgently in need of
treatment or care will be given priority (Varekamp et al., 1998). As such, most waiting lists
make allowances for such patients by prioritising them more highly.

Meiland, Danse, Wendte, Gunning-Schepers and Klazinga (2002) suggest that three criteria are
often used to obtain a fair distribution among scarce health care facilities: (1) 'first-come, first-
serve' criterion, which aims to provide a fair procedure of allocation; (2) priority for urgent
cases, which aims to prevent further decline as a result of longer waiting times and (3) those
with the highest chance of success are selected first. The balance between these three criteria
and their meaning depends on the type of health care service needed.
In sum, in the criteria generally given weight in decisions about allocation of scarce health resources, urgency and the chance of the treatment being successful are identified as acceptable selection criteria (Varekamp et al., 1998). They are also the criteria between which a balance needs to be achieved. Yet, whilst the underlying idea is that care should go first to those who need it most the actual content matter that falls under the term urgency is usually left undefined. Whilst there appears to be consensus that care be provided based on need, there also appears to be a lack of consensus about how to identify those who are considered most in need of mental health care or most mentally ill. In a review of the various definitions of mentally ill, used in research studies, Slade, Powell and Strathdee (1997) found a striking lack of agreement.

Further, even if there was agreement on how to define the mentally ill, in the care of persons with serious mental illness who usually have a significant degree of functional impairment there is a continuing high level of need for mental health services. As such, this presents the problem of spending money on care for those for whom an improved outcome may be less observable than for others (Callahan, 1999). Lavik (1983) reported that 11% of clients defined as heavy service users consumed 75% of the total services used. In particular, heavy service user clients constitute a special challenge to the profession because of their ‘revolving door’ admissions, the severity of their conditions and their non-responsiveness to traditional modes of treatment (Abbott et al., 1997). When the problem of lack of resources in the mental health field is also considered, it is apparent that the decision about which clients deserve the most immediate attention is neither an easy nor a simple decision to make.

Nonetheless, it is clear that some kind of priority order within the public health care system has to be agreed upon. However, opinions differ widely regarding the principles on which to base
such order since there are inherent conflicts in making these decisions that can exist at the same time both within people and between them (Fredelius et al., 2002).

Callahan (1999) suggested resources be allocated by considering the extent of suffering experienced by different groups of clients. As such, the most immediate need is to have that suffering relieved. The major problem with Callahan's approach is the difficulty of calculating the degree of suffering that different groups undergo and of taking into account the variation in individual suffering within each group. Furthermore, in the case of those with serious mental illness, those whose suffering is greatest are not necessarily those who will benefit the most from treatment (Tantum, 1995).

If the dilemma of allocation of scarce resources is considered at the ground level, then in the daily decisions made by a health care professional there will generally be a moral dimension, this being particularly evident in the performance of triage (McDonald, Butterworth, & Yates, 1995). Triage is essentially an exercise in the allocation of health care resources and as such draws heavily on the principles of justice. This exercise is complicated by the nature of the care of seriously ill clients, for whom treatment is frequently long-term and costly. The field of ethics continues to wrestle with the long-standing puzzle of how to compare benefits for a large number of persons who have relatively minor problems with the same or fewer benefits for a much smaller group of persons with more serious problems, but at a much higher individual cost.
1.2 TRIAGE IN GENERAL

"Medical triage" was developed during WWI as a sorting procedure to evaluate and classify casualties, and for establishing priorities for treatment and evacuation (Rund & Rausch, 1981). Traditionally, triage is used most commonly during disasters to provide for the classification of physically ill clients according to their needs for medical care (Birch & Martin, 1985). Medical triage is now implemented extensively in military and civilian disasters to maximise limited resources and to reduce the overload experienced by those providing emergency services. Essentially, medical triage involves a mechanism by which the injured are first sorted according to preestablished criteria and then referred to the appropriate treatment sites. As such, triage processes serve a gate keeping function, by providing a screening mechanism that directs the crisis into the most appropriate channel for its resolution (Sheetman, de la Torre, & Garza, 1979).

In recent years, the process of triage was developed in emergency medicine to direct resources to the most seriously ill (Smart, Pollard, & Walpole, 1999). The process of triage and prioritisation has been developed for standard medical treatments with some systems developing lists of diseases in order of priority and inventories of patient groups in order of urgency (see Fredelius et al., 2002). Similarly, many health care and social service agencies have incorporated some form of triage process into their admission procedures to promote efficiency in distributing the agency's resources to clients (see Bass, Roach, & Griffin, 1987-1988).
The concept of triage has since been adopted in the mental health field in response to the changing needs of the health care system (Mezza, 1992). When considering triage in a mental health context, Tobin et al. (2000) defined triage as the decision involving the initial screening of all incoming referrals, undertaken by a health professional with the aim being a timely and appropriate response to client presentation and a decision about the most appropriate service to which the client should be referred. Tobin et al. (2000) emphasised that the decision needs to be based on the assessed need of the individual and a sound knowledge of all available health services.

Importance of triage is highlighted not just for the severely ill, but also in terms of promotion, prevention and early intervention for public sector mental health services. Each of these factors were emphasised in the Second National Mental Health Plan (Australian Health Ministers, 1998) which was in contrast to the focus in the past on prioritising chronic mental illness (Tobin et al., 2000). In order to improve promotion, prevention and early intervention the front line of mental health services needs to be efficient, effective and accountable. In turn, for access to mental health services to be improved, both triage and comprehensive assessment need to be considered.

Despite the frequent use of the terms triage and assessment synonymously, triage may occur without assessment and assessment may occur without triage. Specifically, assessment is a profession-specific detailed clinical process usually leading to diagnosis. In contrast, triage is a rapid decision method based on a few key criteria. In other words, whilst assessment rates the types of problem, triage generally rates the degree of need. Furthermore, the literature presents
two varying conceptualisations of the definition of triage. Namely, triage may be perceived as a process that decides between whether a client will receive treatment from a particular service or not (e.g. Bengelsdorf, Levy, Emerson, & Barile, 1984). Alternately, triage has been considered as the process of prioritising a client somewhere along a continuum in determining when they will be seen for treatment (e.g. Smart et al., 1999). Depending on the setting that is being discussed, either of these alternatives are valid uses of the term triage. Indeed, in some settings both terms may be appropriate, such that triage may consist of a two step process whereby a decision is made about whether the client will be placed on a waiting list for treatment or referred on to other services. Then, if they are to be retained on the waiting list, a decision is made about what position they will be allocated to.

1.3 TRIAGE AND MENTAL HEALTH SERVICES

In contrast to the dearth of literature available on triage in psychotherapy settings, one mental health setting where a considerable amount of research has been conducted on triage is the psychiatric emergency services. Many researchers have questioned which symptoms should be examined in the emergency room for efficient and accurate triage to occur. Whilst almost all clients who are admitted to inpatient psychiatric wards are screened or evaluated in the psychiatric emergency room, in most settings only a small number of symptoms determine whether a client is admitted or discharged (Feinstein & Plutchik, 1990).

Many models have been proposed for how triage should be practiced and implemented in hospital emergency departments (see McDonald et al., 1995). Allen (1996) claims that the philosophy regarding the practice of emergency psychiatry, advocated by Gerson and Bassuk
approximately 20 years ago, remains the dominant model today. Gerson and Bassuk (1980), proposed that emergency psychiatry should focus on “rapid evaluation, containment and referral” and focus on evaluating the resources and competence of both the client and the community. They suggested seven factors as the basis of a triage model for use in emergency psychiatric treatment. These factors included: client’s support system; dangerousness; psychiatric history and current status; self-care ability; motivation and capacity to participate in treatment; requests of client and family; and client’s medical status.

Bengelsdorf et al. (1984) aimed to develop on Gerson and Bassuk’s model by designing a scale based on the fewest possible criteria that would lead to the most rapid, yet most reliable decision. Bengelsdorf et al. (1984) envisioned the purpose of the Crisis Triage Rating Scale (CTRS) as helping to draw “as sharp a line as possible between those who must be admitted and those who might safely be treated outside the hospital”.

In an examination of assessments made using the CTRS and identification of the most important criteria, three factors emerged. These were: the degree of dangerousness of the client to themselves or others; the capacity and willingness of the client’s family or other social support; and the client’s motivation and ability to cooperate in an outpatient treatment plan. A sum of the scores assigned to each of these three dimensions provided the crisis triage rating. Admission or referral for outpatient crisis intervention treatment was then determined by whether the client’s score fell below or above a determined cut-off point. Bengelsdorf et al. (1984) found that in 97% of cases the scores on the CTRS were concordant with clinical judgement, suggesting that the scale is indeed a valid instrument to use in the assessment of
clients attending the emergency room. However, it should be noted that the ratings were made in retrospect to determine the potential usefulness of the scale. A study by Turner and Turner (1991) validated the CTRS as a tool to rapidly screen emergency psychiatric clients. However, whilst Turner and Turner’s (1991) study supported the predictive validity of the CTRS for identifying psychiatric clients requiring hospitalisation, they reported disagreement about what constitutes the most appropriate cut-off point.

Taken together, the above studies suggest that there are a number of symptoms which are vitally important in the decision of how to triage a client. Suicidal ideation is one such symptom and has been reported to be present in a third to a half of all psychiatric emergency service presentations (Allen, 1996). Feinstein and Plutchik (1990) constructed an assessment form to identify potential violence and suicide. Analysis of the scale indicated a high degree of interrelation among violence items, suicide items and social support and motivation items. Of particular interest was the finding that three items of the scale (lifetime history of suicide attempts, lack of social support systems and an inability to cooperate with the interviewer) correlated significantly with suicide risk in the hospital as estimated from nursing notes. This finding indicates that particular attention needs to be devoted to assessment of these areas.

Consistent with the authors’ proposal that the use of this Violence and Suicide Assessment form may assist clinicians in identifying those clients who need to be hospitalised, the scale could be considered as an alternate form of triaging clients in that setting.

More recently, Holdsworth, Collis and Allott (1999) designed an instrument that would screen for factors associated with harmful behaviour (to self or other) and would be suitable for
nursing staff to complete as part of the admission procedure. The authors deemed the use of single-risk instruments as inappropriate since the initial task is to screen for a range of risks. Their screening instrument drew on 6 indicators of future deliberate self-harm from the literature, which included: previous self-harm; previous contact with mental health services; a diagnosis of a personality disorder; loneliness; hopelessness; and low mood. The authors reported that the instrument showed a high level of inter-rater agreement and was found to be easy to use by staff even without instruction.

Most published literature on mental health triage has concentrated on assessment in a dedicated psychiatric emergency service, or primary response by a psychiatry ‘triage team’ who perform a more detailed assessment of clients in the emergency department and then arrange subsequent referral. However, this is not consistent with the practice in Australian emergency departments where, generally, clients are initially triaged by nurses, then assessed by emergency physicians, with referral to mental health services (Smart et al., 1999). In addition, clients may also arrive at hospital psychiatric wards or mental health services through other avenues, such as mobile treatment teams.

In most of the literature, models of triage have included development of crisis triage rating scales to be applied to clients in the Emergency Department in an effort to determine whether or not they should be admitted. In these contexts, the use of the term triage is more concerned with admittance or referral. Consequently, the scales discussed previously were not developed with a view to prioritise the clients along a continuum of who will be seen, nor were they designed to integrate clients with mental health disorders into a general emergency department.
To address this need, Smart et al. (1999) developed the Mental Health Triage Scale (MHTS), for use in general emergency departments. The MHTS was designed to be used in conjunction with the existing National Triage Scale (NTS) which was developed by the Australian College for Emergency Medicine and has been accepted by emergency departments across Australasia and made mandatory in NSW. The MHTS triages clients by helping to decide along a continuum of ten minutes to two hours, when clients should be seen and hence, triages the clients in terms of determining the relative level of priority of each client.

In the development of the MHTS, a number of factors were considered in assigning mental health triage categories. These included: manifest behavioural disturbance; presence of or threatened deliberate self-harm; perceived or objective level of suicidal ideation; client's current level of distress; perceived level of danger to self or others; and need for physical restraint / accompanied by police. Scoring highly on any of these factors, favours treatment within 30 minutes. Other factors which are assessed in the MHTS include: disturbance of perception, manifest evidence of psychosis, level of situational crisis, descriptions of behaviour disturbance in community, current level of community support and presence of carer/supportive adult.

The authors (Smart et al., 1999) reported that the use of the MHTS facilitates treatment of clients with mental health problems in a generalist framework, such that conditions are evaluated and prioritised and clients are then referred to psychiatry in the same way as occurs for other specialities, such as surgery and paediatrics. Staff surveyed about the use of the triage scale reported feeling safe with acute mental health clients, since clients and their carers know
their classification and hence, the time frame in which they are to be seen. Therein, much of the ambiguity surrounding the clients' presentation to the emergency department is alleviated. As such, alleviation of ambiguity might be considered as a further purpose of triage. Presentation of the length of time that a client can expect to wait for treatment is equally important in the context of psychotherapy services. Hence, the importance of accurate and appropriate triage measures is indicated.

Frequently, a client may be triaged at a number of points along a continuum of care. Patients may arrive at emergency psychiatric services via referral from general practitioners; via mobile treatment teams; from concerned family members or friends; of their own volition; as well as other alternatives. In these cases, some form of triage is likely to have already occurred, and will then occur again at the hospital. From this point, clients are then frequently referred to outpatient psychological services (Ellison & Wharff, 1985). Hence, whilst the evaluation and assessment of the client officially begins in the emergency room, the continuation of the process of deciding the most appropriate form of treatment for those clients referred to public sector psychotherapy services is likely to be further developed at the place of treatment. As such, it is of grave concern that whilst there is a plethora of triage scales designed for use in emergency services, there exists no validated equivalent measure for use in out-patient psychological services.

Whilst there is a vast literature regarding triage in emergency psychiatric services, comparatively little has been written about triage in mental health services at the community level. The South Eastern Sydney Area Health Service is a large metropolitan health service in Sydney, Australia which developed a systematic intake and triage process at entry point (Tobin
et al., 2000). In the absence of any known published versions of a community mental health triage scale suitable for intakes, the South Eastern Sydney Area Health service developed their own. Tobin et al. (2000) identified three functions of an entry system to a well-organised mental health service. They are to: 1) prioritise referrals based on urgency; 2) direct resources to manage emergencies quickly; 3) reduce unnecessary use of resources by limiting the inappropriate use of services. Hence, with these functions in mind they developed a triage system which included five major categories. These were 'Emergency' (where a response was required immediately), 'Urgent' (where a response was required within 24 - 48 hours), 'Non-urgent' (where a response could be delayed for days to weeks), 'Deferred decision' (where insufficient information about the referral was available and staff needed to seek further information) and 'Referred' (where the decision at intake was that alternative service providers were appropriate and available). Each category was provided with descriptive anchor points, a recommended response time, and actions to assist the intake clinician in making the most appropriate management decision. These categories are not suitable for use in a psychological or psychotherapy setting where, according to such a system, most clients would be classified as non-urgent, even though there would be wide variation in level of urgency within that classification.

The increasing recognition of the need for triage has led to its introduction as a mandatory part of assessment for all public mental health services in the state of New South Wales, Australia. The NSW Mental Health Outcomes and Assessment Training (MH-OAT) was introduced in 2001 as a state wide initiative to strengthen the mental health assessment skills of clinical staff in mental health (NSW Department of Health, 2001a). Information published by NSW Department of Health (2001a) states that "effective services are those that achieve the best
possible outcome for the individual circumstances of each client. To do that, systematic triage, assessment and measurement are essential for the development of an appropriate management plan (p.2)". It is stated that the triage forms used under MH-OAT (see Appendix B) are designed to “document the relative priority or urgency of a face to face presentation to mental health services” (NSW Department of Health, 2001b, p.3). The forms require the clinician to indicate the client’s triage category between Category 1 (Immediate Intervention required; considered as Life-threatening) to Category 5 (General Observation required; considered as Non-Urgent and can be seen within 120 minutes).

Whilst it is expected that clinicians in public sector psychological services will also complete these triage forms, they are only relevant for these services in cases where the person needs to be immediately referred to a service designed to deal with acute or crisis presentations. Despite stating that they are designed to document relative priority, this is clearly for acute or crisis presentations and therein, they do not provide any criteria or a method for triaging clients waiting to receive psychological intervention.

1.4 TRIAGE AND PSYCHOTHERAPY

Attempts at tackling waiting lists have traditionally concentrated upon ways of either increasing service efficiency or of rationing therapeutic services (White, 2000). Various solutions for controlling waiting lists have been proposed. Some examples include offering patients one or two appointments soon after referral and prior to being placed on a secondary waiting list (Geekie, 1995); predicting therapeutic need from the referral letter (Westbrook, 1991); referring on more readily and restricting access to the service (Startup, 1994); curtailing treatment length (Westbrook, 1995).
From a clinician's perspective, it is important to respond swiftly to referrals in order to assess the urgency and severity of the difficulties and prevent problems escalating or becoming more firmly established (Stallard & Sayers, 1998). It is also important to provide service users with an accessible and responsive service. Lengthy delays may result in clients becoming dispirited or less motivated and leave them feeling dissatisfied when they eventually receive psychological services (Robertshaw & Sheldon, 1992; Stallard, 1994).

In recent times, more interest has been paid to separating the process of assessment from treatment (Stallard & Sayers, 1998). As such, assessment interviews involve clinicians meeting with clients fairly soon after referral to assess the extent and nature of the problems. If treatment is required, the client is then placed upon a waiting list for therapy. These systems enable clinicians to make their own assessment of urgency and therapeutic need independent of referral information or referrer assessment of priority. They also provide a mechanism for quickly filtering out those clients who are inappropriately referred. Assessment systems have been found to be favoured by clients who report them to be helpful and supportive. In addition, research has found they lead to increased satisfaction rates and are generally preferred to the more traditional process of waiting for both assessment and therapy (Shawe-Taylor, Richards, Sage, & Young, 1994; Westbrook, 1995).

Beyond the need for assessment in determining urgency and severity, Aveline (1995) discussed a number of other justifications for assessing clients for psychotherapy. Aveline (1995) refers to the therapeutic benefit that may be obtained from the assessment itself, but also notes that psychotherapy has the potential to harm and indeed, is simply inappropriate for some clients.
Hence, an important justification for assessing clients for psychotherapy, is to determine within the limitations of the assessment process, a client's broad suitability for psychotherapy.

In psychotherapy services, triage frequently occurs as a result of assessment and, where needed, would normally be considered as the final stage in the process of assessment. As such, triage is a necessary part of public-sector psychotherapy assessment which involves high level assessment skills (McDonald et al., 1995). Indeed, it has been acknowledged that triage, at least in a medical setting, "is seen as an area that requires greater skill than does the general treatment" (Purnell, 1991). Severely disturbed clients have invariably had repeated losses and destructive forces, separations and betrayals in their lives. These losses generally lead to a high level of distrust and so the process of assessment may be fraught with difficulties (Denford, 1995).

Tantum (1995) reported that the more experience psychotherapists have, the more likely they are to spend time in assessment rather than in treatment. This suggests that assessment in psychotherapy is considered to be both particularly difficult and particularly useful. If triage is considered as the final stage in the process of assessment, then a formulation of the case may be considered as the step prior to making a decision on triage. Hence, before triage can occur, the clinician needs to construct a conceptualisation of the many facets that the client brings to the assessment to arrive at a case formulation since appropriate triage will be based on an accurate formulation of the case. Case formulation in psychology generally refers to the describing, understanding and explaining of a client, which extends beyond summarising data and diagnostic labelling (McDougall & Reade, 1993). The importance of case formulation skills has
become heightened with the advent of managed care and time-limited psychotherapy, since psychotherapists are increasingly called on to work more efficiently and to justify the value and expense of their services (Eells, Kendjelic, & Lucas, 1998).

Implicit in the diagnostic and assessment process is the importance of the relationship between client and diagnostician. Through the use of this subjective instrument the clinician not only listens to complaints or presenting difficulties but identifies incongruencies or discontinuities which, in turn, may become diagnostic or treatment issues for psychotherapy. Each of the subjective processes involved in arriving at the formulation simplify the input in some way whilst formulating the case (McDougall & Reade, 1993). However, it is important to note that the very subjectivity of the process, will have implications for the clinician’s decision on how to triage the client.

In turning to the empirical literature on triage and psychotherapy, extensive database searches revealed that to date, prioritisation for psychotherapy has been poorly investigated. The only body of empirical research that appears to address the process of prioritising clients in a psychotherapeutic setting was conducted by Sandell and Fredelius (1997). This paper outlines the precarious situation in Sweden in 1990-1994, immediately after the national health insurance system decided on a limited grant to subsidise psychotherapy with non-medical therapists in private practice. At the time, a long waiting list had accumulated in Stockholm County, such that it was calculated that if the amount of funding remained constant each year, it would take between eight and ten years to eliminate the waiting list – provided it did not increase in the meantime. Hence, it became clear that some order of priority had to be agreed upon.
Politicians and health care officials in Stockholm County demanded that some substantial, need-related principle of selection be established, and suggested various priority groups. When views of various groups were sought, it became obvious that the task of prioritising is dependent on values and opinions and consequently, the authors hypothesised that prioritising would be influenced by the professional, ideological and moral interests that a party represents.

Sandell and Fredelius’s (1997) research examined prioritisation among a group of ‘clients’ who were seeking third-party-paid dynamic psychotherapy, by ‘judges’ who represented parties with possibly different interests in the task, under the restriction of scarce resources. The authors interviewed 15 clients who were highest on the waiting-list of the Stockholm County Council for subsidised psychotherapy. The unstructured, individual interview covered the present situation in the client’s life, his or her background and life history, and his or her reasons for seeking psychotherapy. On the basis of each transcript, a one page case-vignette was formulated that it was hoped would provide the judges with a ‘vicarious interview’.

The case vignettes were then presented to three groups of 10 judges who were asked to choose which clients should and which should not be offered third-party-paid psychotherapy. Judges were recruited in each of 3 groups, where the categories of groups were clinicians, decision-makers and laymen. The clinicians were assumed to represent the professional perspective on selection for psychotherapy and included psychotherapists and psychiatrists. The decision-makers were assumed to represent the political and administrative perspective. All the judges in this group were politicians or officials in the handling of health-care decisions. Finally, the laymen were composed so as to represent as wide a variation as possible with respect to
profession, educational level, age, and gender. No judge in this group had any kind of experience with psychotherapy. Judges were interviewed and asked to sort the clients presented in the case vignettes into two groups, so that half of the clients were to be offered subsidised dynamic psychotherapy and half were not.

The results showed that nearly all of the judges in each group made the same assignment for each of three clients of the total of fifteen clients. Overall, there were nine clients about whom there was reasonable overall agreement. There were also a group of clients about whom there appeared to be systematic between-group differences. What seemed to be common among those clients who were almost universally selected for therapy was a difficult or traumatic childhood, relations with repeated separations and/or physical violence, strong motivation for rehabilitation through psychotherapy and advanced professional training. In contrast, what seemed to be common among those clients who were almost universally not selected for therapy was a weak or questionable motivation for psychotherapy and no severe background trauma.

Assessment variables scored on the basis of the vignettes were then divided into two groups: sociodemographic and psychiatric variables. Regression analyses were run in each group of judges, with each group of variables as independents. The regression weights were used as indicators of the relevance and importance of a variable as a priority criterion. In general, the decision-makers and the laymen agreed in their weighting of the variables, whereas the clinicians differed from the other two groups. Ironically, there was a tendency for the clinicians to assign less weight to the psychiatric variables than to the socio-demographic ones. Both
clinicians and laymen assigned their greatest weights to information related to sexual assaults on the clients, whereas current GAF-related information had the greatest weight among the decision makers. There were different opinions about the clients' experiences of psychiatric care, which were weighted heavily by the decision-makers and laymen, but not by the clinicians. In contrast, experiences of psychotherapy were heavily weighted, positively, by the clinicians, but not at all by the decision-makers and negatively weighted by the laymen.

The authors propose that the findings may be interpreted as a conflict over *suitability* and *urgency* between the clinicians on the one hand, and the decision-makers and the laymen, on the other. It was suggested that traumatic background and a history of severe suffering may make a case urgent from a humanitarian point of view, whereas 'suitability' referred to whether psychotherapy had a favourable prognosis with a client. The psychiatric variables were generally of the kind that indicated the urgency of a case in terms of traumatology and suffering, and the decision-makers and the laymen tended to attach more weight to them than did the clinicians. But why did the clinicians place more weight on the socio-demographic variables? The authors suggested that one interpretation is that the clinicians were more concerned about suitability because they are the ones who have to cope with unsuitability.

However, it should also be noted that clinicians did not exclusively emphasise suitability. The authors believed that the clinicians' positive weighting on clients with sexual assaults and personality disorders is also based on urgency considerations. The larger dispersion among the clinicians, suggests that the suitability-versus-urgency conflict is stronger in this group than in the other two groups. For the decision-makers and the laymen, without much knowledge of the fact that clients are indeed differentially responsive to psychotherapy, the prioritising task may
appear less complex and mainly a matter of deciding who is in most need of help.

In summary, the results of Sandell and Fredelius’s (1997) study showed that the various judges studied in the sample valued the clients differently as applicants for subsidisation, such that the decision of how to prioritise individual clients appears somewhat dependent on the values and opinions of the assessor, as well as their understanding of the treatment to be implemented.

The vignette presentations of the clients in this study had the function of stimuli, so to speak, not of ‘subjects’. The authors considered this type of ‘representative stimulus sampling’ advantageous from the point of view of external validity, and therefore also more persuasive where generalisations to real-life situations are concerned. However, all of the judges frequently complained about the difficulty of a task in which they had no opportunity to witness for themselves how the client related to them. This highlights the need for more realistic and relevant research into the issues of prioritising for highly demanded services using actual clients, rather than the arbitrary coding of case vignettes.

Fredelius, Sandell and Lindqvist (2002) published a follow-up article exploring the question of who should receive subsidized psychotherapy. Essentially, the study discussed in the article furthered the original study by reporting qualitative analyses used to further validate and elucidate their hypotheses. Fredelius, et al. (2002) sought to find evidence of conflict between suitability and urgency in the explicit reasoning of the judges during the decision-making process. Their qualitative analysis of the prioritisation conducted by the judges and described above confirmed the statistical findings that “the conflict between suitability and urgency is a
central issue in prioritising patients for psychotherapy (p.652).” In examining the verbal reasoning of the judges, the authors found numerous references to the conflict between urgency and suitability and concluded that prioritising is frequently done whilst wrestling with the inherent conflict between urgency and suitability. Overall, the results published by Sandell and Fredelius (1997) and Fredelius et al. (2002) are consistent with what is purported in the literature to be the key criteria used in treatment selection for scarce health resources, i.e., urgency and the chance of treatment being successful (Varekamp et al., 1998).

In considering factors involved in triaging persons for psychotherapy with those criteria used in emergency services, there is a large degree of overlap between criteria for urgency. However, additional categories would be needed that are not relevant in emergency services. For example, suitability for treatment or the potential to benefit from treatment is an additional idiosyncratic factor relevant when making decisions about the allocation of scarce resources in psychotherapy.

Clients who are determined to seek out treatment are not necessarily the clients who will most benefit from it (Tantum, 1995). Hence, a client’s suitability for treatment is an important consideration in determining the most appropriate categories for triaging clients referred to a service in high demand. The concept of suitability for psychotherapy has been studied by a number of researchers (Piper, Azim, McCallum, & Joyce, 1990; Truant, 1998, 1999), however, there is little agreement about how to define the term. Similarly, the concept of psychological mindedness is broadly accepted by clinicians as an important and relevant attribute for patients treated in dynamically oriented psychotherapy (Conte, Ratto, & Karasu, 1996), yet whilst this
complex concept may be intuitively understood by clinicians, its definition, as it is used in the literature is far from precise (Conte et al., 1996).

Studies on outcome prediction will also be relevant to the issue of prioritising clients for treatment in that one factor in making decisions about triaging is treatment prognosis or expected outcome. Luborsky, Crits-Christoph, Mintz and Auerbach (1988) reported findings from a large-scale research project that sought to determine the profile of clients who would benefit from psychotherapy. Findings from the clinicians judgments in the initial studies using contrived cases, suggested that three aspects of a prospective psychotherapy client were shown to have clear prognostic significance: recent onset of difficulties, relative mildness of dysfunction, and good social assets (education and income). When clinicians used transcriptions of actual interviews with real clients, three main factors emerged as useful in predicting outcomes of psychotherapy: general emotional health, intellectual achievement, acute depression. The researchers then examined pre-treatment and during-treatment variables to determine treatment outcomes. Treatment outcomes were significantly predictable from both pre-treatment and during-treatment information, however, only 5-10% of the outcome variance was predicted. In other words, the outcome of treatment was only modestly predicted by either pre-treatment or during-treatment measures.

Bloch (1979) proposed a number of characteristics of clients who would have a favourable outcome in long-term psychotherapy: 1) a reasonable level of personality integration and functioning; 2) motivation for change; 3) realistic expectations of the therapeutic processes involved, including psychological mindedness; 4) at least average intelligence; 5) no psychosis
or severe personality disorder; 6) anxiety or depression at the time of assessment; 7) no irresolvable crises in life.

The criteria given by Bloch (1979) are essentially the criteria that most clinicians would give for clients who are likely to make a good recovery from an emotional disorder, irrespective of treatment. Furthermore, these criteria do not correlate well with the characteristics of the severe clients who are actually referred to public-sector psychotherapy services (Abbott et al., 1997). As such, the characteristics suggested by Bloch provide little assistance to the process of deciding which clients would benefit most from treatment.

Published research about which clients are most likely to benefit from psychotherapy is lacking, presumably because the very question depends on one’s moral views about which group of clients should be seen. Hence, to determine which clients will benefit, the goals of therapy first need to be considered. Andrews (1992) suggests that the goals of psychotherapy are rarely spelt out, mainly because psychological treatment has only recently been considered from a public health perspective. Questions are only now being raised about how to spend on psychotherapy with the greatest effect on public health. Tantum (1995) proposed some possible goals of psychotherapy as being: to reduce symptoms; to reduce disability; to increase quality of life; especially quality of personal relationships; to aim for recovery; to prevent deterioration; to reduce total health care cost of client; to prevent emotional disorder; to make treatment available to as many people as possible; to target the most severely ill or disturbed. Hence, the chosen goals of any given service will have some impact on determining which clients will be given priority.
Presumably a high quality psychotherapy service would seek to achieve a multitude of these goals in the treatment of clients who present with a multitude of severe symptoms. As such, it becomes apparent that determining a newly referred client's level of priority in comparison to other clients on the waiting list, is indeed a very complex process.

In summary, in contrast to the large amount of research published about triage of clients in emergency services, very little has been published about prioritising clients in a psychotherapy setting. This is surprising in the current economic climate, since public sector clinics generally have long waiting lists and yet, there are no suggestions in the literature to guide clinicians as to how to most accurately prioritise their client lists. This is despite the expectation that specialist psychotherapy services demonstrate that they are dealing, and dealing effectively with the more disturbed (Aveline, 1995).
Chapter 2
DEVELOPMENT OF THE CLIENT PRIORITY SCALE (CPRS)

2.1 BACKGROUND
Clinicians have often informally admitted that in many busy community practices, assessment and management of waiting lists is done poorly or unsystematically, if at all. Often the attempt to triage clients, results in those in crisis receiving immediate service, whereas those who might make long term gains and benefits may only receive inconsistent or no service. The result of this is that clinicians act as crisis workers and as such low job satisfaction and burn-out become a real concern. Hence, there is a great need for more research and evaluation into the management and distribution of scarce counselling resources.

The Psychotherapy Centre in the Illawarra Area Health Service is a public sector service which provides empirically validated short-term and long-term psychotherapy. The service is unique in the community in terms of the clients it deals with. Frequently, clients referred to the centre are those whom have been judged as too difficult to treat elsewhere. In other words, the Psychotherapy Centre deals with the most highly disturbed clients requiring psychological intervention. As such, there is a high demand for the service and a long waiting list.

A consistent and well-supported entry system for mental health services is an important part of reducing the variance in clinical decision-making (Tobin et al., 2000). In the absence of published validated measures of triage in a psychological setting, clinicians of the
Psychotherapy Centre, designed the Client Priority Rating Scale (CPRS; Shirvington, Innes, Jordan, & Kuter, 2000; see Appendix C) to prioritise clients on the centre’s waiting list.

In developing the CPRS, the authors aimed to design a tool which would be guided by psychological literature about how to obtain a fair distribution of service provision when the demand outweighs supply for psychotherapeutic intervention. Meiland et al. (2002) identified three criteria used most commonly for this task: (1) ‘first-come, first serve’ criterion; (2) priority for urgent cases; (3) selection of those with the highest chance of success. In the development of the CPRS, an attempt was made to factor in each of these criterion, however, given the severe nature of the problems of clients referred to the service, it was important to place differing emphasis on each of these criterion. As such, the items on the scale were principally chosen to minimise the risk of adverse outcomes caused by a prolonged wait for psychotherapy. Hence, the tool sought to prioritise based on clients’ level of acuity, suicidality and lack of personal or social resources, so that those persons who were less likely to be able to ‘wait’ would be identified as high priority. To a lesser degree, the scale also aimed to capture those who may have a greater likelihood of benefiting from therapy.

Stallard and Sayers (1998) identified the importance of responding swiftly to referrals in order to assess the urgency and severity of the difficulties. Hence, at the Psychotherapy Centre, a routine clinical assessment interview is carried out with all new referrals, following which clinicians complete the CPRS. The CPRS then provides a total score which is used to determine their level of priority. When a clinician has an available opening, clients are then assigned to the respective clinician according to their CPRS score. The CPRS is completed after a routine
clinical assessment interview, which would include information related to the domains of the scale. The weighted subscales are summed to obtain a total score which is used to prioritise waiting times for psychological services. When a clinician has an available opening, the client with the highest CPRS score is then assigned to that respective clinician. In the service which trialled this method, clients on the waiting list, were followed up monthly by telephone to assess whether there has been a change in their urgency and hence, whether or not their place on the waiting list should be revised. In this way, clients are also informed as to how long they can expect to wait to be seen (see Figure 1).

![Diagram](image)

**Figure 1**: Process of triaging clients using the Client Priority Rating Scale.

### 2.2 DESCRIPTION OF THE SCALE

Categories in the Client Priority Rating Scale (CPRS) were derived from those used in psychiatric emergency services and included questions on suicidality, severity of presenting problem, and availability of interim care options. As discussed previously, some of the categories used in emergency services will not be relevant to the process of triaging clients for psychotherapeutic treatment and additional categories will be needed that are not relevant in
emergency services. Hence, the scale also includes questions regarding strength of internal coping resources and possible negative impact on a client of waiting. In summary, the subscales reflect a balance between severity, current living situation and support as well as dispositional variables that might interact with a client’s level of symptoms.

The first subscale is Suicidality, which has items related to present stress, symptoms, thoughts of suicide, current plan, prior suicidal behaviours and available supportive resources (negatively scored). The suicidality items in the CPRS are highly similar to the Dangerousness item in the Crisis Triage Rating Scale (Bengelsdorf et al., 1984). The suicidal scale emphasizes features such as changes in behaviour, triggering events, ideation and presence of a suicide plan and past history of suicidal behaviours, all of which are known to predict to some extent actual suicidal behaviour. Suicidality was considered to be an important part of triage, since those clients whose lives are threatened by their psychological distress, clearly are in urgent need of help.

The second subscale is Severity of Presenting Problem. Along with Suicidality, this subscale was designed to obtain a rating of the urgency of presentation, such that those clients whose lives were significantly disrupted by the severity of their symptoms, would be impacted more greatly by having to wait than those with a lesser degree of severity. The third and fourth subscales, which are Strength of Internal Coping Resources and Availability of Interim Care Options, respectively, were designed to obtain ratings of protective factors that may enable the client to wait for a longer period. Strength of Internal Coping Resources was included to reflect a client’s resilience in the face of psychological problems, as well as their potential ability to
benefit from psychotherapy. Hence, it was expected that a lower score on this variable would suggest that they may be able to wait longer than clients who are extremely labile. Availability of Interim Care Options measured whether clients were already in a reasonably well managed and organised care situation consisting of families, general practitioners and/or local volunteer support groups and hence, would be less impacted by having to wait longer for psychological care.

The final subscale, Possible Negative Impact of Waiting, has items which pertain to: significant deterioration of mental health, loss of openness to psychological intervention, risk of self harm/harm to others, previous history of difficulty accessing services, anniversary reactions as an aspect of presentation. This subscale aims to obtain a rating of urgency by rating the likely current and future increase in severity of presentation. Hence, the Possible Negative Impact of Waiting subscale gives clinicians the opportunity to express concerns about or predict potential deterioration that would make future psychotherapy treatment more difficult.

2.3 AIMS

The present study aims to contribute to research on triage in psychotherapy in a number of ways. First, whilst there is some evidence for the effectiveness of triage in emergency medicine, there is relatively little research on prioritisation of psychotherapy waiting lists. The present study provides an opportunity to evaluate a tool designed to prioritise level of need among clients placed on the waiting list of services that provide psychotherapy. The objective of this research is to assess the impact and effectiveness of this triage protocol in managing psychotherapy waiting lists.
Broadly, the study sought to evaluate how the CPRS was being used, its utility, reliability and the characteristics of the clients who are being prioritised most highly for treatment.

More specifically, on the basis of previous literature and the authors’ purpose of the CPRS, a number of main findings are expected:

1) the CPRS will prioritise persons along a continuum, such that the higher the CPRS score, the less time a person will spend on the waiting list before beginning treatment.

2) those clients assigned a higher level of priority, according to the CPRS will have a lower level of functioning and more severe clinical problems.

3) The CPRS will have good psychometric properties.

4) There will be equivalent outcomes for those assigned a lower priority score who have to wait longer periods to be seen as for those assigned a higher priority score.

Two settings were chosen in order to examine these aims. The Psychotherapy Centre was the setting in which the scale was originally developed. As this service is a public sector service with a long waiting list, it was chosen as a naturalistic setting that provides psychological interventions across a range of diagnosable disorders. The second study utilises a randomised controlled trial for depression in order to more rigorously examine the psychometric properties of the scale. Hence, in the second study, the CPRS was explored in a single diagnosis, controlled setting. The two distinct settings were chosen to examine whether the CPRS would yield different outcomes when the findings were examined in a naturalistic compared with a research setting and a multi-diagnostic compared with a uni-diagnostic setting.
Chapter 3

INVESTIGATING THE USE OF THE CLIENT PRIORITY RATING SCALE (CPRS)
IN A MULTI-DIAGNOSTIC, NATURALISTIC SETTING

3.1 RESEARCH QUESTIONS

The following research questions will be addressed:

i) How reliable is the CPRS?

ii) What is the relationship between a person’s allocated score on the CPRS and their diagnosis?

iii) What is the relationship between a person’s allocated score on the CPRS and measures of severity of psychological problems?

iv) How does CPRS score relate to care options following assessment?

v) What are clinicians’ views on the utility of the CPRS method?

3.2 METHOD

3.2.1 Participants

Sixty-eight clients referred to a local psychotherapy service, The Psychotherapy Centre, were studied. Clients were consecutive attenders of the service and as such were representative of clients referred to this service for psychological treatment. Average age of participants was 35 years (SD = 11.1). Sixty-six percent (n = 45) were female and 34% (n = 23) were male. Twenty-one percent (n = 14) were married, 27% (n = 18) were in a defacto relationship, 28% (n = 19) were single and 22% (n = 15) were separated or divorced. The majority of the clients were unemployed (38%; n = 26), 22% (n = 15) were engaged in part-time or full-time work,
19% \((n = 13)\) identified themselves as students, whilst 15% \((n = 10)\) were engaged in home duties.

The majority of the clients \((47\%; n = 32)\) were referred by general practitioners, 26% \((n = 18)\) were referred by the area health service, 15% \((n = 10)\) were referred by non-government agencies and 12% \((n = 8)\) were referred by private psychiatrists.

### 3.2.2. Measures

The **Client Priority Rating Scale** (CPRS; Shirvington et al., 2000; See Appendix C) is a 14-item scale with 5 subscales (Suicidality, Severity of Presenting Problem, Strength of Internal Coping Resources, Availability of Interim Care Options and Possible Negative Impact of Waiting). The scale was designed as a tool to allocate persons on a waiting list dependent on perceived level of priority. The minimum possible score is 1, the maximum possible score is 19, where a higher score is indicative of a higher priority.

The **Global Assessment of Functioning** (GAF) Scale, which obtains information for Axis V of the Diagnostic and Statistical Manual of the Mental Disorders, Fourth Edition (DSM-IV; American Psychiatric Association [APA], 1994). This is the standard method used to assess the clinician’s judgement of a patient’s overall level of functioning (Moos, McCoy, & Moos, 2000). It has been estimated that the GAF is the single most widely used rating scale to assess impairment among patients with psychiatric and/or substance use disorders (Piersma & Boes, 1995).
Clinicians responded to an open-ended question pertaining to subjective opinions about the aetiology and maintenance of the clients’ diagnoses. Subjective ratings were also provided about the following treatment variables: perceived success of therapy, perceived improvement and expected long-term outcome. These treatment variables were obtained using single item likert scale ratings from 1 to 10. A rating of 1 represented very unsuccessful; no improvement; very negative; respectively. A rating of 10 represented very successful; greatly improved; very positive; respectively. The measure of success and measure of improvement were devised by Carl Rogers and colleagues (see Rogers & Dymond, 1954) and have been used extensively in psychotherapy outcome studies since this time (e.g., the Penn studies, Luborsky et al., 1988). The 'expected long term outcome' rating was developed specifically for this study.

3.2.3 Procedure

To assess reliability of the CPRS, four experienced psychologists were each asked independently to complete a CPRS with respect to 13 hypothetical clinical vignettes. The vignettes were designed especially for this study. Whilst it would have been more desirable to have clinicians conduct ratings on actual clinical interviews, this was not feasible in this study, given that this was a public sector treatment facility. Hence, hypothetical clinical vignettes were utilised as an alternative.

The main part of the study involved collecting the following information for each client: demographic information, referral information and DSM-IV diagnoses (Axis I, II, III, IV and V; APA, 1994). Clinicians in the service use a structured clinical interview. Following the interview, diagnosis is recorded according to whether the clients’ symptomatology met DSM-
IV criteria (APA, 1994). In addition, clinicians were asked to provide a qualitative therapeutic diagnosis. Date of assessment, date treatment began and termination dates were recorded so that length of time between assessment and treatment as well as the length of treatment could be calculated. Clinicians also made ratings about treatment variables of perceived success of therapy, perceived improvement and expected long-term outcome.

A copy of the CPRS form that was completed for each client was compiled with the above information. No identifying information about the clients was available to the researchers. Finally, clinicians were given a one page sheet requesting their opinions regarding the utility of the CPRS, as well as asking for suggestions as to how the scale might be improved.

3.2.4 Statistical Analyses

Prior to analysis, scores on the dependent variables, the CPRS were examined using SPSS Version 10 for accuracy of data entry, missing values and fit between their distributions and the assumptions of both univariate and multivariate analysis. No missing values were identified. Similarly, none of the scores were identified as outliers. The variable was slightly skewed (Kolmogorov-Sminov=.152, p<.05), however it was decided not to transform the variable since the level of skew was slight (Tabachnick & Fidell, 1996) and the CPRS would be hard to interpret if it were to be transformed.

Inter-rater agreement was estimated by Pearson correlation between judges' total CPRS scores assigned to clinical vignettes. The internal consistency of the CPRS was calculated using the alpha coefficient of reliability estimate for the total 14 item scale and for two subscales:
suicidality (5 items), and possible negative impact of waiting (5 items). Face validity of the scale items is supported in part by the similarity of the suicidality items in the CPRS to the Dangerousness item in the Crisis Triage Rating Scale (Bengelsdorf et al., 1984), a well validated scale (see Turner & Turner, 1991). Additional appraisal of validity consisted of a series of one-way and multivariate ANOVAs to examine the relationship between DSM-IV diagnosis and CPRS; CPRS and assessment outcome and to examine differences in high or low CPRS scores on treatment variables. To investigate the relationship between Global Assessment of Functioning (GAF) and CPRS as well as clients’ CPRS score and waiting period, a series of Pearson correlations were calculated. Whilst, it is noted that there are limitations in using correlations, it was considered necessary to use them in these cases due to small numbers and subsequent lack of statistical power.

3.3. RESULTS

3.3.1 Inter-rater agreement

Four clinicians rated each of the 13 hypothetical vignettes using the CPRS. A high level of inter-rater agreement was found for each of the subscales of the CPRS using the Average Measure Intraclass Correlation, including Suicidality ($r (13) = .91$), Severity of Presenting Problem ($r (13) = .80$), Strength of Internal Coping Resources ($r (13) = .92$), Availability of Interim Care Options ($r (13) = .69$) and Possible Negative Impact of Waiting ($r (13) = .89$) on the clinical vignettes. High inter-rater agreement was also found for the total score of the CPRS ($r (13) = .95$). These results suggest that the clinicians consistently made triage ratings of the vignettes in a similar manner, using similar sources of information as that that would be obtained from clients in an assessment interview. In addition, no significant difference was
found between the mean CPRS scores of each group of clients who were assessed respectively by each of the four therapists, $F(4, 60) = 1.86, \text{ ns.}$

### 3.3.2 Internal consistency

The overall alpha coefficient of reliability for the Client Priority Rating Scale was .77, which is acceptable when considering that the scale assesses a somewhat heterogeneous range of domains. As expected, the subscales of Suicidality (6 items) and the Negative Impact of Waiting (5 items) had lower reliability estimates ($\alpha = .63$ and .51, respectively) due to the small number of diverse items per subscale.

### 3.3.3 Relationship between CPRS and diagnosis

Clients' CPRS scores ranged from 3 to 16, with a mean of 8.54. As can be seen in Table 1, over half of the clients presented with a mood disorder and/or an anxiety disorder. These numbers are not mutually exclusive, because some clients were referred for treatment of a number of Axis I (and Axis II) disorders. In addition, clients may have been referred for more than one disorder within each family of disorders. For example, seven clients were diagnosed with more than one anxiety disorder. The majority of those presenting with an Anxiety Disorder were diagnosed with Post-Traumatic Stress Disorder (28%; $n = 19$) or Panic Disorder with or without Agoraphobia (26%; $n = 16$). Those with a mood disorder ($M = 9.36$) were found to have been assigned significantly higher CPRS scores than those without a mood disorder ($M = 7.61$), $F(1,66) = 4.42, \ p<.05.$
Of those who were diagnosed with an Axis II disorder, the majority were diagnosed with Borderline Personality Disorder (62%). Those who were diagnosed with Borderline Personality Disorder were found to have been assigned significantly higher CPRS scores ($M = 11.00$) than those clients with no Axis II diagnosis ($M = 8.01$) or another Axis II disorder ($M = 8.00$), $F(2,65) = 4.215$, $p<.05$.

Table 1
Number, percentage and CPRS of clients across Axis I and Axis II disorders

<table>
<thead>
<tr>
<th>Axis Diagnosis</th>
<th>Clients</th>
<th>Mean CPRS</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axis I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substance Disorders</td>
<td>24% (n=16)</td>
<td>8.25</td>
<td>2.0</td>
</tr>
<tr>
<td>Mood Disorders</td>
<td>54% (n=37)</td>
<td>9.36</td>
<td>3.4</td>
</tr>
<tr>
<td>Anxiety Disorders</td>
<td>60% (n=41)</td>
<td>8.22</td>
<td>3.5</td>
</tr>
<tr>
<td>Eating Disorder</td>
<td>10% (n=7)</td>
<td>8.29</td>
<td>5.0</td>
</tr>
<tr>
<td>Other Axis I Disorder</td>
<td>17% (n=11)</td>
<td>7.45</td>
<td>4.6</td>
</tr>
<tr>
<td>Axis II</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>68% (n=46)</td>
<td>8.01</td>
<td>3.2</td>
</tr>
<tr>
<td>Borderline Personality Disorder</td>
<td>19% (n=13)</td>
<td>11.00</td>
<td>3.7</td>
</tr>
<tr>
<td>Avoidant Personality Disorder</td>
<td>6% (n=4)</td>
<td>8.50</td>
<td>4.7</td>
</tr>
<tr>
<td>Other Axis II Disorder</td>
<td>6% (n=4)</td>
<td>8.00</td>
<td>3.8</td>
</tr>
</tbody>
</table>

Note. Percentages do not sum to 100, because some clients received multiple diagnoses. CPRS = Client Priority Rating Scale.
Amongst this sample of clients, there was a high level of psychosocial and environmental problems (as demonstrated by Axis IV diagnoses). The mean number of Axis IV problems was 2.23 (SD = 1.6). Over half of the clients were reported as having problems with their primary support group (57%, \( n = 39 \)). In addition, approximately one third had problems relating to the social environment (37%, \( n = 25 \)), occupational problems (35%, \( n = 24 \)) and/or economic problems (31%, \( n = 21 \)). There was a significant difference between the total number of Axis IV problems diagnosed in those who were assigned a high priority score from those who were assigned a lower one. Those who were assigned a lower priority score, that is, those who fell in the bottom two thirds of the sample (CPRS = 0-10), had a mean number of 1.93 Axis IV problems (SD = 1.4). In contrast, clients assigned a priority score in the top third (CPRS = 11-16) had a mean number of 2.79 Axis IV problems (SD = 1.9), \( F(1, 66) = 4.54, p < .05 \).

The subjective category of therapeutic diagnosis, was coded according to whether or not the client had a history of abuse or neglect (where such a history had been revealed during the assessment). There was a trend suggesting that those with a self-reported history of abuse or neglect were more likely to have a higher CPRS score (\( M = 9.32 \)) when compared with those clients who did not report a history of abuse or neglect (\( M = 7.73 \)), \( F(1, 64) = 3.38, p = .07, ns \). There were a number of demographic factors that distinguished those who were assigned a high priority score from those who were assigned a lower one. When compared with those who were assigned a lower priority score (those in the bottom two thirds of the sample), those clients who were assigned a priority score in the top third were more likely to be involved in recreational drug use (62.5%), not be currently in a relationship (56.5%) and be unemployed (45.8%). Percentages reflect proportion of persons within the top third on the CPRS in those categories.
3.3.4 Relationship between CPRS and Global Assessment of Functioning (GAF) Scores

CPRS and Global Assessment of Functioning (GAF) scores at the time of assessment were found to be significantly negatively correlated \( r (65) = -0.614, p < 0.01 \), such that the lower a person’s GAF score, the more likely that they were assigned a high CPRS score. All of the subscales of the CPRS, excluding one, were found to be correlated with GAF scores (see Table 2). Availability of Interim Care Options subscale was not significantly correlated with GAF scores. This may be because the subscale reflects factors external to the person’s functioning. In contrast, the other subscales measure mostly internal factors. The finding of a moderate relationship between CPRS score and GAF supports the view that a component of the CPRS is related to severity and serves as a measure of validity.

Table 2

Correlations between subscales of the Client Priority Rating Scale (CPRS) and functioning

<table>
<thead>
<tr>
<th>Subscale of the CPRS</th>
<th>Pearson correlation with GAF</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Suicidality</td>
<td>(-0.57^*)</td>
</tr>
<tr>
<td>b. Severity of Presenting Problem</td>
<td>(-0.51^*)</td>
</tr>
<tr>
<td>c. Strength of Internal Coping Resources</td>
<td>(-0.38^*)</td>
</tr>
<tr>
<td>d. Availability of Interim Care Options</td>
<td>(-0.11)</td>
</tr>
<tr>
<td>e. Possible Negative Impact of Waiting</td>
<td>(-0.45^*)</td>
</tr>
<tr>
<td>TOTAL PRIORITY SCORE</td>
<td>(-0.61^*)</td>
</tr>
</tbody>
</table>

Note. N=65. CPRS = Client Priority Rating Scale; GAF = Global Assessment of Functioning

* = significant at the 0.01 level
3.3.5 Relationship between CPRS and care options following assessment

As can be seen in Table 3, the majority of the clients assessed at the service were placed on the waiting list for treatment ($n = 45$). Thirteen of those who were assessed were referred to a more appropriate alternate service, 6 clients failed to respond to contact after the assessment and 2 clients declined treatment. Of those clients assessed, those who failed to respond to contact, post-assessment, were those who had received the highest CPRS Score ($M = 11.50$). Those clients referred to another service obtained a lower CPRS Score ($M = 7.85$), although this was not significant, $F(6,59) = 1.811$, $ns$. Those who were accepted for treatment and placed on the waiting list ($M = 8.35$) were assigned, on average, a comparatively lower CPRS than those clients who dropped out prior to treatment.

Table 3

<table>
<thead>
<tr>
<th>Outcome from assessment</th>
<th>Clients</th>
<th>Mean CPRS</th>
<th>S.D.</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clients referred elsewhere</td>
<td>20</td>
<td>13</td>
<td>7.85</td>
<td>3.2</td>
</tr>
<tr>
<td>Dropped out prior to treatment</td>
<td>9</td>
<td>6</td>
<td>11.5</td>
<td>3.3</td>
</tr>
<tr>
<td>Declined treatment</td>
<td>3</td>
<td>2</td>
<td>4.5</td>
<td>0.7</td>
</tr>
<tr>
<td>Accepted for treatment</td>
<td>68</td>
<td>45</td>
<td>8.35</td>
<td>3.5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
<td>66</td>
<td>8.54</td>
<td>3.5</td>
</tr>
</tbody>
</table>

Note. CPRS = Client Priority Rating Scale
Of the total number of 66 clients who were assessed and assigned a CPRS score, 40 had begun and/or completed treatment at the time the study was conducted. On average, clients waited 139 days from the end of the assessment period until they commenced treatment. A significant relationship was found between a client’s CPRS score and length of time spent on the waiting list before treatment began ($r (36) = -.36, p<.05$). Specifically, the higher the CPRS score, the less time the person spent on the waiting list before beginning treatment (see Figure 2).

![CPRS Score vs. Waiting Time](image)

**Figure 2.** Length of time between assessment and treatment by CPRS score.

At the time of data collection, 5 clients who had been assessed and prioritised using a CPRS score, were still on the waiting list. These clients had an average CPRS Score of 6.2. 33 clients had completed treatment at the time of data collection, whilst 2 of the clients remained in treatment (see Table 4). Five clients that began treatment, terminated treatment prematurely. These clients had the highest CPRS score ($M = 9.6$) of all of the clients who were assessed and
accepted for treatment. Interestingly, a trend was found such that clients who prematurely terminated treatment were seen much more promptly \((M = 48 \text{ days})\) than other clients who were accepted for treatment \((M = 144 \text{ days})\), \(F(2, 33) = 1.211, \text{ ns}\).

Table 4

<table>
<thead>
<tr>
<th>Outcome from assessment</th>
<th>Clients</th>
<th>Mean CPRS</th>
<th>S.D.</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Still on waiting list</td>
<td>11</td>
<td>5</td>
<td>6.2</td>
<td>3.0</td>
</tr>
<tr>
<td>Terminated prematurely</td>
<td>11</td>
<td>5</td>
<td>9.6</td>
<td>5.4</td>
</tr>
<tr>
<td>Still in treatment</td>
<td>5</td>
<td>2</td>
<td>7.5</td>
<td>2.1</td>
</tr>
<tr>
<td>Completed treatment</td>
<td>73</td>
<td>33</td>
<td>8.77</td>
<td>3.3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
<td>45</td>
<td>8.35</td>
<td>3.5</td>
</tr>
</tbody>
</table>

Note. CPRS = Client Priority Rating Scale.

In a series of one-way ANOVAs, no significant differences were found between those classified as high priority (in the top 1/3 of CPRS scores; Range = 11-16) and those classified as low priority (in the bottom 2/3 of CPRS scores; Range = 0-10) on the three treatment variables of perceived therapy success \((F(1, 34) = .01, \text{ ns})\), client’s improvement at termination of therapy \((F(1, 34) = .22, \text{ ns})\) and expected long-term outcome \((F(1, 36) = .81, \text{ ns})\).
3.3.6 Clinicians’ subjective opinions on use of the scale

Each of the clinicians surveyed agreed that the CPRS was a useful clinical tool and introduced more objectivity into the prioritisation process. One clinician wrote that the Suicidality subscale was particularly helpful because it provided a means of numerically comparing clients who, at face value appeared equivalent in severity. Another clinician provided the following feedback, “in an already beleaguered service, having to decide who will get treatment (when everyone referred really needs treatment) can feel like an ethical compromise for clinicians...when mental health service resources are at a critically scarce level and many of the clients are emergency or priority cases, triaging can be extremely difficult – if not impossible. Hence, it helps to have some sort of objective method”.

Three of the 4 clinicians agreed that the CPRS had been effective in the process of triaging the clients of the service. The other clinician replied that they were uncertain of the effectiveness and cited concerns that at times a high score merely reflected a client’s “impulsivity and chaos”. This sentiment was echoed by another of the clinicians who stated that ‘priority’ clients can be unsuitable for psychotherapy, since their urgency can often be a function of their inability to manage or reflect upon their life problems and hence may possibly be indicative of their unsuitability for psychotherapy at that time.

There was some confusion reported in relation to the Strength of Internal Coping Resources and Availability of Interim Care Options subscales. In general, there appeared to be consensus that these two subscales of the CPRS could be better defined and that the items needed further explanation.
Chapter 4

INVESTIGATING THE USE OF THE CLIENT PRIORITY RATING SCALE (CPRS) IN A SINGLE DIAGNOSIS, RESEARCH TRIAL

4.1 RESEARCH QUESTIONS

This study sought to replicate the findings from the previous study in a more standardised and psychometrically precise study. In addition, this study sought to explore further research questions resulting from the outcomes of the previous study. Hence, some of the research questions are replicated, whilst the remainder of the research questions were specific to this study. The following research questions will be addressed:

i) How reliable is the CPRS?

ii) What is the relationship between a person’s allocated score on the CPRS and their diagnosis?

iii) What is the relationship between a person’s allocated score on the CPRS and measures of severity of psychological problems?

iv) What is the relationship between a person’s allocated score on the CPRS and outcome measures after treatment?

4.2 METHOD

4.2.1 Participants

Clients (n=86) met criteria for Major Depression according to the Structured Clinical Interview for DSM-IV Axis I disorders (SCID-I; First, Spitzer, Gibbons, & Williams, 1996a). In addition to the depression diagnosis, other Axis I diagnoses were also recorded. The Structured Clinical
Interview for DSM-IV for Axis II Disorders (SCID-II; First, Spitzer, Gibbons, & Williams, 1996b) was also administered and where participants met screening criteria for any of the personality disorders, this was noted as a provisional diagnosis. Provisional Axis II diagnoses were then reviewed by the treating clinical psychologist following four months of contact and final Axis II diagnoses were derived. In all analyses involving Axis II diagnoses, final diagnoses were used.

Average age of participants was 45 years (SD = 12.5). Sixty percent (n = 52) were female and 40% (n = 34) were male. Thirty-eight percent (n = 52) were married, 32% (n = 27) were separated or divorced, 19% (n = 16) were single, 9% (n = 8) were in a defacto relationship and 2% (n = 2) were widowed. The majority of the clients were unemployed at the time of study (63%; n = 54) despite a large proportion having been previously employed in professional positions (47%; n = 40) or clerical and sales positions (24%; n = 21). The average number of years of education was 13.6 (SD = 3.3).

The majority of the clients had become aware of the study through recruitment via the radio or newspaper (54%; n = 47). In addition, 15% (n = 13) were referred by non-government agencies, 13% (n = 11) were referred by the area health service, 11% (n = 9) heard about the study through a friend and 7% (n = 6) were referred by psychiatrists or general practitioners.

Eighty percent (n = 69) of participants had previously been engaged in psychotherapy or received some form of psychological treatment. Seventy-three percent (n = 63) of the sample were on psychiatric medication at the time of intake whilst 28% (n = 24) had been hospitalized
in a psychiatric facility on at least one occasion. More than half of the sample reported a family history of psychiatric illness (59%; $n = 51$).

28% ($n = 24$) of those who were initially offered and accepted a place in the trial dropped out prior to completing the 16 weeks of treatment. Dropouts were defined as clients who prematurely ended treatment for personal reasons, such as inability to make appointments, medical illness, or wish to seek alternate treatment.

4.2.2 Therapists and therapy

Eleven therapists, 9 female and 2 male, participated in the study. All therapists were advanced Clinical Psychology graduate students who had received group training and supervision by an expert in supportive-expressive therapy. The therapists' average age was 33 years ($SD = 7$; range 24 - 46) and they had practiced individual therapy for an average of 8 years ($SD = 6$; range 2 - 22).

Participants received 16 sessions of supportive-expressive dynamic therapy. The treatment contract specified a maximum of 16 once-weekly sessions of 50 minutes duration for those in the individual therapy condition. Those in the group therapy condition received 14 group sessions once-weekly of 90 minutes duration plus two individual sessions (one prior to commencing the group and one at termination). 52% ($n = 45$) were randomly allocated to the group therapy condition whilst 48% ($n = 41$) were randomized into the individual therapy condition.
The manual-guided form of psychodynamic psychotherapy was a time-limited version of supportive-expressive psychotherapy (Luborsky, 1984) that was specifically designed for use with a depressed sample (Luborsky et al., 1995). In this form of dynamic therapy, therapists provide a supportive environment in which to explore patients' thoughts and feelings. When indicated, they identify and interpret the patients' central relationship themes and examine the contributions of these themes to the patients' symptoms. Supportive-expressive psychotherapy has been shown to be efficacious for a variety of psychological disorders (for e.g., Woody et al., 1983). It has also been shown to be an effective psychological intervention in the treatment of depression (e.g., Luborsky et al., 1996).

Therapy sessions were audio recorded. In addition to using the manual, therapists attended a weekly supervision session during which cases were discussed and material from sessions played so that technical issues could be discussed. Individual supervision was also available, as needed.

4.2.3 Measures

As in the previous study, the Client Priority Rating Scale (CPRS) and Global Assessment of Functioning (GAF) was used (refer to Section 3.2.3).

The Beck Depression Inventory (BDI) is a 21-item inventory self-report measure of depression. It is a widely used, reliable measure of depressive symptoms (see Beck, Steer, & Garbin, 1987, for a review). It has high internal consistency and correlates highly with other self-report measures of depression and with clinician ratings of depression ($r = .60-.90$).
The Hamilton Rating Scales for Depression (Hamilton, 1960) is a 21-item interview-rated measure of depressive severity. It is generally considered to be the standard measure of depressive severity when evaluating the efficacy of treatments for depression (Santor & Coyne, 2001). Items on the Hamilton Rating Scales for Depression (HRSD) consist of groups of graded statements, (i.e., options) reflecting different degrees of severity of primarily somatic and vegetative symptoms of depression, although some items assess cognitive symptoms, such as depressed mood and guilt. The HRSD was intended as a clinician-rated measure of severity to be used with individuals who are already diagnosed with depression and not as a means of diagnosis.

The measure of the therapeutic relationship used was the Working Alliance Inventory (Horvath & Greenberg, 1989). The Working Alliance Inventory (WAI) is a 36-item self-report inventory based on Bordin's (1979) pantheoretical model of the therapeutic alliance. It consists of Bond Development, Goal Agreement and Task Agreement subscales, as well as an overall alliance index. Each subscale consists of 12 items scaled in a seven-point Likert-type format. Horvath and Greenberg (1989) reported estimated alphas ranging between .87 and .93 and nontrivial correlations between other relationship measures. Both client and therapist versions have been constructed. In this study, only the client version has been used, as this has been shown to be a better predictor of outcome than the therapist version (Horvath & Symonds, 1991).
4.2.4 Procedure

Clients were recruited through mental health centres, newspapers, radio announcements and the university where the research was conducted. Announcements indicated that the University was conducting a study on depression and those suffering from some of the symptoms were invited to participate. All clients were assessed by an experienced psychodiagnostician, using the SCID-I and SCID-II as well as the Hamilton Rating Scale for Depression. At this time they were also given the Beck Depression Inventory to complete. Following the assessment, the assessor completed a CPRS for each client and completed a summary sheet with information pertaining to all axes of DSM-IV (APA, 1994). While the CPRS would generally be used to prioritise waiting lists, in this study, its inclusion was for the purpose of acquiring robust psychometric data.

Clients were interviewed again at the end of therapy using the SCID-I and Hamilton Rating Scale for Depression (HRSD) and the Global Assessment of Functioning (GAF) was re-rated. The Beck Depression Inventory (BDI) was completed by clients. The Working Alliance Inventory (WAI) was administered at the end of the third session and subjective treatment variables of perceived success, improvement and expected long-term outcome that were used in the previous study (see Section 3.2.3) were completed by both clients and therapists at the end of treatment. All questionnaires were completed in the absence of the therapist.

Rather than re-assessing inter-rater agreement, in this study an independent rater was used who was not present in the intake assessment, but had access to the outcome of the SCID-I, a brief summary of the interview and a transcript of a portion of the intake interview. The independent
rater coded the CPRS for 34% (n = 29) of the entire sample. This was carried out in order to establish whether the CPRS can be used as a brief instrument without interviewing the client, but instead completing it based on existing data.

4.2.5 Statistical Analyses

The statistical analyses replicated those performed in the previous study. Prior to analysis, scores on the dependent variables (BDI; HRSD; GAF and WAI) and the Client Priority Rating Scale were examined using SPSS Version 11.5 for accuracy of data entry, missing values and fit between their distributions and the assumptions of both univariate and multivariate analysis. No missing values on the CPRS were identified. Where missing values on dependent variables were found, these were excluded from the analysis. None of the scores were identified as outliers. Similarly to the previous study, the variable was slightly skewed (Kolmogorov-Smirnov=.179, p<.05). Once again, it was decided not to transform the variable for reasons stated in Section 3.2.4.

A one-way Anova was performed on the CPRS scores between those clients assigned to individual therapy (M=8.29) and those assigned to the group therapy condition (M=8.84), which yielded no significant differences between the groups, F(1,84) = 0.56, ns. Further, there were no significant differences in outcome between those who received individual therapy and those who received group therapy on the BDI (M=12.03, 14.96, respectively, F (1,57) =1.09, ns); GAF (M=66.48, 66.15, respectively, F (1,56) =.64, ns); or the HRSD (M=10.42, 11.58, respectively, F (1,55) =.44, ns). Hence, participants in the two treatment conditions were combined to produce a single treatment variable of psychotherapy treatment and analyses were run with groups combined.
The relationship between CPRS and outcome scores was examined by correlating the CPRS total and subscale scores with residual treatment gain scores for each outcome measure. The gain scores were calculated as the difference between the obtained post treatment score and a predicted score, based on regressing pre-treatment scores for each outcome measure. Thus, for the BDI and HRDS negative gain scores were associated with greater treatment gain. For the GAF, however, positive gain scores were associated with greater treatment gain. The rationale for using residualised difference scores was based on the recognition that clients enter therapy with varying levels of symptom severity which have been consistently linked to treatment outcome (Garfield, 1994). Thus, objective outcome measures in the present study represent pre-post change on each measure controlling for pre-treatment variance.

In calculating correlations among the variables, two-tailed tests of significance were conducted. In order to maximise the power of the analyses to detect potentially meaningful effects, the alpha level was set at .05. This was done after taking into consideration an acceptable method of adjusting for the inflated experiment-wise error rate due to the intercorrelations among many of the variables. Hence, correlations that represent medium-to-large effect sizes (i.e., $r > .30$, Cohen, 1988) are reported in order to highlight findings which would potentially merit further investigation.
4.3 RESULTS

4.3.1 Inter-rater agreement

In calculating the inter-rater agreement between the assessor who had conducted the assessment and the independent rater who had only had access to the summary of the assessment, high inter-rater agreement was found between the two raters for the total score on the CPRS ($r (33) = .76, p<.01$). Inter-rater agreement for the subscale of Suicidality was low ($r (33) = .33, ns$). It is expected that this lack of a significant relationship is due to the second rater not having access to the breadth of information available to the assessor and hence the second rater's scores are likely to be less sensitive. However, inter-rater agreement was consistently significant for each of the other subscales of Severity of Presenting Problem ($r (33) = .74, p<.01$), Strength of Internal Coping Resources ($r (33) = .44, p<.05$), Availability of Interim Care Options ($r (33) = .48, p<.05$) and Possible Negative Impact of Waiting ($r (33) = .46, p<.01$).

4.3.2 Internal consistency

The overall alpha coefficient of reliability for the Client Priority Rating Scale was .82. The subscales of Suicidality (5 items) and the Negative Impact of Waiting (5 items) had lower reliability estimates ($\alpha = .51$ and .65, respectively). As discussed in the previous study, this is to be expected due to the small number of diverse items per subscale.

4.3.3 Relationship between CPRS and diagnosis

Clients' CPRS scores ranged from 2 to 15, with a mean of 8.58. As can be seen in Table 5, more than half of the sample was diagnosed with an anxiety disorder and/or a dysthymic disorder. A few clients were additionally diagnosed with a substance disorder, however, other Axis I disorders were poorly represented.
### Table 5

**Number, percentage and CPRS of clients across Axis I secondary diagnoses**

<table>
<thead>
<tr>
<th>Secondary Diagnosis</th>
<th>Clients %</th>
<th>Mean CPRS</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety Disorders</td>
<td>58% (n=50)</td>
<td>9.06</td>
<td>3.4</td>
</tr>
<tr>
<td>Dysthymic Disorders</td>
<td>56% (n=48)</td>
<td>8.44</td>
<td>3.3</td>
</tr>
<tr>
<td>Substance Disorders</td>
<td>5% (n=4)</td>
<td>10.0</td>
<td>4.7</td>
</tr>
</tbody>
</table>

*Note: Percentages do not sum to 100, because some clients received multiple diagnoses. CPRS = Client Priority Rating Scale*

The majority of those presenting with an Anxiety Disorder were diagnosed with Generalised Anxiety Disorder (26%; n = 22) or Panic Disorder with or without Agoraphobia (18%; n = 16). Those with co-morbid panic disorder (M = 10.5) were found to have been assigned significantly higher CPRS scores than those without the diagnosis (M = 8.14), F(1,84) = 6.69, p<.05. Similarly, those with co-morbid generalised anxiety disorder (M = 9.77) were found to have been assigned significantly higher CPRS scores than those without the diagnosis (M = 8.17), F(1,84) = 3.75, p<.05.

Whilst not statistically significant, those diagnosed with a personality disorder (M=9.15, n=41) were found to have been assigned slightly higher CPRS scores than those without a personality disorder (M = 7.84, n=25), F(1,62) = 2.46, ns. Upon further examination, it was found that those with a Borderline Personality Disorder diagnosis were found to have been assigned significantly higher CPRS scores (M = 11.8) than other clients without a Borderline diagnosis (M = 7.9), F(1,65) = 14.01, p<.01 (see Table 6).
Table 6

Number, percentage and CPRS of clients across Axis II disorders

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Clients</th>
<th>Mean CPRS</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Axis II disorder</td>
<td>39% (n=25)</td>
<td>7.84</td>
<td>3.1</td>
</tr>
<tr>
<td>Avoidant Personality Disorder</td>
<td>36%(n=24)</td>
<td>9.08</td>
<td>3.1</td>
</tr>
<tr>
<td>Borderline Personality Disorder</td>
<td>15% (n=10)</td>
<td>11.80</td>
<td>2.5</td>
</tr>
<tr>
<td>Other Axis II Disorder</td>
<td>30%(n=20)</td>
<td>8.05</td>
<td>3.5</td>
</tr>
</tbody>
</table>

Note: Percentages do not sum to 100, because some clients received multiple diagnoses. CPRS = Client Priority Rating Scale.

Acknowledging that the numbers of cases is extremely small (n=6), of interest is that those clients with a Personality Disorder (Paranoid, Schizoid or Schizotypal) grouped under Cluster A in the DSM-IV (APA, 1994) obtained lower CPRS scores (M = 7.2) than clients who were not diagnosed with a Cluster A Personality Disorder (M = 8.6), F(1,65) = 1.09, p<.01.

There was a high level of psychosocial and environmental problems (as demonstrated by Axis IV diagnoses). The mean number of Axis IV problems was 3.2 (SD = 1.9). However, in contrast to the previous sample, this group of participants appeared to have more psychosocial and environmental problems. Consistent with the first study, nearly three quarters of the clients were reported as having problems with their primary support group (73%, n = 63). In addition, a large proportion of the sample were identified as having problems relating to the social
environment (69%, \(n = 59\)), occupational problems (65%, \(n = 56\)) and/or economic problems (45%, \(n = 39\)).

There was a significant difference between the total number of Axis IV problems diagnosed in those who were assigned a high priority score as compared with those who were assigned a lower one, \(F(1, 84) = 4.87, p < .05\). Those who were assigned a lower priority score, were those who fell in the bottom two thirds of the sample (CPRS = 0-10), had a mean number of 2.92 Axis IV problems (SD = 1.8). In contrast, those clients who were assigned a priority score in the top third (CPRS = 11-15) had a mean number of 3.88 Axis IV problems (SD = 2.0).

4.3.4 Relationship between CPRS and intake scores

CPRS and GAF scores at the time of assessment were found to be significantly negatively correlated (\(\rho (86) = -.781, p < .01\)), such that the lower a person’s GAF score, the more likely that they were assigned a high CPRS score (refer to Figure 3). On the Beck Depression Inventory (BDI), another measure of severity, the CPRS was again found to be correlated (\(\rho (86) = .53, p < .01\)), such that the higher a person’s score on the BDI, the more likely that they were assigned a high CPRS score. The same pattern of results was found with the HRSD (\(\rho (86) = .61, p < .01\)).
All of the subscales of the CPRS, excluding one, were found to be correlated with GAF scores (see Table 7). Similar to the previous study, the Availability of Interim Care Options subscale was not significantly correlated with scores on any of the outcome measures. Similarly, when the relationship between BDI and HRSD scores at intake were correlated with the CPRS subscale scores, the same pattern of results was found as was found with the GAF scores.
Table 7

Correlations between subscales of the Client Priority Rating Scale (CPRS) and intake scores on various outcome measures

<table>
<thead>
<tr>
<th>Subscale of the CPRS</th>
<th>Pearson correlation with</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GAF</td>
</tr>
<tr>
<td>a. Suicidality</td>
<td>-.63**</td>
</tr>
<tr>
<td>b. Severity of Presenting Problem</td>
<td>-.85**</td>
</tr>
<tr>
<td>c. Strength of Internal Coping Resources</td>
<td>-.67**</td>
</tr>
<tr>
<td>d. Availability of Interim Care Options</td>
<td>-.18</td>
</tr>
<tr>
<td>e. Possible Negative Impact of Waiting</td>
<td>-.61**</td>
</tr>
<tr>
<td>TOTAL PRIORITY SCORE</td>
<td>-.78**</td>
</tr>
</tbody>
</table>

Note. N = 86. ** = significant at the 0.01 level

4.3.5 Relationship between CPRS and outcome and process variables

Twenty-four clients dropped out during therapy. Given that in the first study, those who dropped out were found to have higher CPRS scores and hence, were considered to be more acute, CPRS scores for those who dropped out during treatment were compared. There were no significant differences found in CPRS score for those who dropped out of therapy (M=8.79) as compared with those who completed treatment (M=8.50), F(1, 84) = 0.126, ns.

CPRS and BDI Standardised Residual scores were found to be significantly correlated (r (59) = .266, p<.05), as were CPRS and HRSD Standardised Residuals (r (57) = .26, p<.05). The direction of the relationship was such that the higher a person's CPRS score, the more likely
they were to still be depressed after therapy (refer to Figure 4). Similar, although non-significant patterns were found between the GAF standardised residual score and the CPRS ($r(58) = -0.148, ns$).

![Figure 4: Relationship between CPRS and BDI and HRSD standardised residual scores](image)

Figure 4. Relationship between CPRS and BDI and HRSD standardised residual scores

Follow-up correlations were conducted on standardised residual scores and CPRS subscale scores. Results of the analyses of the BDI Standardised Residual scores and HRSD Standardised Residual scores with the subscales of the CPRS are presented in Table 8. It can be seen that for both the BDI and the HRSD, there was a significant relationship between the Strength of Internal Coping Resources subscale and the residual outcome scores, such that those with more coping resources did better in therapy.
Table 8

Correlations between CPRS subscales and BDI (N=59) and HRSD residual scores (N=57)

<table>
<thead>
<tr>
<th>Subscale of the CPRS</th>
<th>Pearson correlation with BDI Residual score</th>
<th>Pearson correlation with HRSD Residual score</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Suicidality</td>
<td>.09</td>
<td>.18</td>
</tr>
<tr>
<td>b. Severity of Presenting Problem</td>
<td>.24</td>
<td>.28*</td>
</tr>
<tr>
<td>c. Strength of Internal Coping Resources</td>
<td>.34**</td>
<td>.36**</td>
</tr>
<tr>
<td>d. Availability of Interim Care Options</td>
<td>.14</td>
<td>.02</td>
</tr>
<tr>
<td>e. Possible Negative Impact of Waiting</td>
<td>.32*</td>
<td>.19</td>
</tr>
<tr>
<td>TOTAL PRIORITY SCORE</td>
<td>.27*</td>
<td>.26*</td>
</tr>
</tbody>
</table>

Note: BDI = Beck Depression Inventory, HRSD = Hamilton Rating Scales for Depression.
* = significant at the 0.05 level, ** significant at the 0.01 level

Total CPRS scores and Working Alliance Inventory scores were found to be significantly correlated ($r (62) = -.313, p<.05$) such that the stronger the working alliance, the lower the CPRS score. A relationship was also found between total CPRS score and two of the WAI subscales. Specifically, CPRS was found to be significantly correlated with the Task subscale of the WAI ($r (64) = -.293, p<.05$) and the Goal subscale of the WAI ($r (62) = -.356, p<.05$), but not the Bond subscale of the WAI ($r (62) = -.190, p=ns$).

In a series of One-way ANOVAs, no significant differences were found between those classified as high priority (in the top 1/3 of CPRS scores; Range = 11-16) and those classified...
as low priority (in the bottom 2/3 of CPRS scores; Range = 0-10) on the subjective therapist measures of perceived therapy success ($M=6.16, 6.83$, respectively, $F (1,64) = .20, \text{ns}$), or client’s improvement at termination of therapy ($M=6.58, 7.26$, respectively, $F (1,64) =3.06, \text{ns}$). However, significant differences were found on the variable of expected long-term outcome, such that those classified as high priority ($M = 5.47$) were allocated a mean rating suggestive of a worse long-term outcome than those classified as low priority ($M = 6.76$), $F(1, 63) = 7.4, p<.01$.

Turning to the client subjective measures of perception of change as a result of therapy, at termination, there were no significant differences between those classified in the high priority group and those classified in the low priority group on ratings of perceived improvement ($M=6.85, 7.69$, respectively, $F (1,51) =3.77, \text{ns}$), success ($M=8.47, 8.71$, respectively, $F (1,54) = .34, \text{ns}$) and satisfaction ($M=7.87, 8.01$, respectively, $F (1,54) = .10, \text{ns}$).
Chapter 5
GENERAL DISCUSSION

5.1 OVERALL FINDINGS

5.1.1 Utility of the Client Priority Rating Scale (CPRS)

This thesis sought to establish the utility of the Client Priority Rating Scale (CPRS) as a method for prioritising persons on a waiting list for psychotherapy. The CPRS was examined in a multi-diagnostic, naturalistic setting and a uni-diagnostic, research setting. In the naturalistic setting, the length of time spent on the waiting list was related to CPRS score, such that the higher the CPRS score, the less time the person spent on the waiting list before beginning treatment. This suggested that the CPRS was being used as intended, that is, as a method of prioritising clients along a continuum.

In both settings, CPRS scores were found to be related to a client level of functioning at the time of the initial assessment. The second study aimed, in part to examine the performance of the CPRS when used in a standardised trial with known and psychometrically sound measures of outcome. In the setting of a controlled research trial, the CPRS was found to be related to scores on a self-report measure of depression and a clinician-rated measure of depressive severity. These findings suggest that across both the multi-diagnostic and uni-diagnostic setting, the scale adequately captured the dimension of severity.

In some ways, the concept of triage is about developing a 'common language' that allows the comparison of a list of clients based on their level of need. Clinicians' subjective opinions of the CPRS indicated consensus that they found it a useful tool to objectify the process of
prioritising high need clients in an under resourced psychotherapy service.

5.1.2 Psychometric properties

In both settings, CPRS score was found to have acceptable internal consistency estimates. In addition, the finding that CPRS was related to established psychometrically valid instruments of severity, provides evidence of validity.

The CPRS was designed to be used as a triage tool following a standard clinical interview and was implemented in this way in the first setting. In the first study, hypothetical clinical vignettes were used to assess inter-rater agreement. A high level of inter-rater agreement was found on the standardised vignettes. One of the questions that arose from the research findings in the naturalistic setting, was whether the scaled could be refined for use as a rapid screening tool.

Hence, in the second study, ratings of the person who conducted the assessment interview were compared with those of an independent rater who had access to limited written information about the case. Good inter-rater agreement was found between the two raters on the total score, suggesting that the CPRS may be able to be modified as a brief screening tool as one rater only had access to summary interview material. However, inter-rater agreement on the subscale of Suicidality was lower, which suggests that important information may be missed if a person does not have the opportunity to conduct a face to face interview. Hence, further research is warranted into how well the scale can be adapted as a brief method of triage.

As will be discussed later in the discussion section, the CPRS performed relatively similarly across both settings, in terms of its relationship with diagnosis, intake and outcome. This
provides tentative evidence of convergent validity. In summary, considering that the CPRS was designed as a preliminary tool to prioritise wait lists, these findings indicate that the CPRS is has acceptable psychometric properties, pending future research.

5.1.3 Profile of those prioritised most highly

Over half of the clients in the naturalistic setting were diagnosed with a mood disorder and/or an anxiety disorder. Those clients with a mood disorder were assigned a significantly higher CPRS than those without a mood disorder. In the research setting, whilst all participants in the sample were diagnosed with a major depressive disorder, over half of the sample was co-morbidly diagnosed with a dysthymic disorder and/or an anxiety disorder. These clients with co-morbid diagnoses were allocated a higher CPRS score.

In both settings, clients with a Borderline Personality Disorder received a higher CPRS, when compared with those clients with no personality disorder or with a different personality disorder. Clients with Borderline disorders tend to be distinguished from those with other personality disorders or no personality disorder due to their crisis proneness, which often includes suicidal threats, impulsivity and affect dysregulation. That the CPRS was able to distinguish this group from others suggests it was also able to identify urgency of need, an important consideration when prioritising patients for treatment. Consistent with this, in both settings, clients with higher CPRS scores were also more likely to have greater DSM-IV Axis IV problems, including problems with primary support group, social environment, occupation and economic problems. In sum, these findings reflect that those with more severe psychopathology were judged as being of higher priority.
In the naturalistic setting, those clients with the highest CPRS score after assessment were most likely to drop out prior to commencing treatment. In addition, clients who terminated treatment prematurely had higher CPRS scores despite waiting shorter amounts of time than other clients studied. One interpretation of these findings is that those obtaining the highest priority rating are in such an acute level of crisis that they are unable to commit to therapy or to engage in the process once treatment has begun or may need referral for inpatient treatment. In summary, it would appear that those clients prioritised as having the highest level of need according to the CPRS may have been unable to make use of psychological therapy at that time.

5.1.4 Impact of high priority status on outcome

In the naturalistic setting, where length of treatment was determined by individual clinicians, no significant differences were found on the clinician rated treatment variables of perceived therapy success, client’s improvement at termination of therapy and expected long-term outcome according to CPRS score. Hence, in that setting, those clients seen as gaining the most from therapy cannot be distinguished according to their assigned priority score, suggesting that those who are rated as more urgent are not gaining any more or any less than other persons prioritised as less urgent. Similarly, the lack of a significant difference between clients in terms of who ‘benefited’ from therapy implies that those who had to wait for longer periods of time before being seen did not suffer any deleterious effects from having to wait.

In contrast to the first study, treatment period in the second study was time-limited, such that all clients received 16 weeks of therapy, regardless of level of severity. In this study, when the relationship between CPRS and outcome was measured (controlling for level of severity at intake) it was found that those persons who had been assigned higher CPRS scores were less
likely to have improved over the course of the therapy. In other words, those who were assigned lower CPRS scores, did better in therapy. This was supported by clinician ratings that those with higher CPRS scores were expected to have worse long-term outcomes. This finding is consistent with research that shows that those who are initially more severe do not do as well in therapy compared with those who are less symptomatic from the outset (see Garfield, 1991). In addition, there is a large amount of research which indicates that treatment of Axis I disorders is less successful when there is a co-morbid Axis II disorder than when there is no Axis II disorder present (see Young & Behary, 1998). Hence, when it is considered that those with higher CPRS scores were more likely to have a personality disorder diagnosis, it is not surprising that persons with higher CPRS scores had a less positive outcome in a time-limited treatment program, since more treatment sessions are likely to have been needed.

When examining the relationship between therapy outcome and subscale scores of the CPRS, on self-report and clinician rated measures of depressive severity there was a significant relationship between outcome and Strength of Internal Coping Resources. Severity of Presenting Problem was also found to be related to level of change on a clinician-rated measure of severity of depression. The direction was such that persons who had lower strength of internal coping resources or were considered more severe, were more likely to have had less change across therapy. This is interesting in that these categories may be considered to represent those specific variables of conflict encountered in the task of prioritising clients, namely suitability and urgency.
5.2 BALANCING URGENCY AND SUITABILITY

Varekamp et al. (1998) write that in daily medical practice the meaning of urgency is ambiguous. A formal distributive justice requires equal treatment of equal patients. Hence, in order to minimise variation in decision making and maximise fairness, urgency criteria should be defined precisely. In Fredelius et al.’s (2002) study, health care officials were particularly interested in contemplating this question of what constitutes urgency. In contrast, clinicians spent less time on this issue, whilst laypersons spent none. Fredelius et al. suggested that the reasoning of the clinicians could be condensed as “Is a psychiatric diagnosis an adequate priority criterion for judging urgency? (p.651).” Both the clinicians and the health care officials appeared to concur that subsidized psychotherapy should be restricted to those who can be given a proper psychiatric diagnosis. Hence, this would appear to be considered as at least one clearly demarcated criterion for deciding urgency. In line with this argument, in this study, ratings on the Global Assessment of Functioning were considered as one indicator of urgency.

Across both settings, CPRS total scores and most subscales were related to the Global Assessment of Functioning (GAF), suggesting that the scale adequately captured the dimension of severity. Despite this relationship, it is important to stress that the CPRS and GAF are not interchangeable, as the relationship between them was only moderate and the former includes measures of urgency, ability to wait and availability of other resources, not featured in the GAF. Nonetheless, the scale is currently more weighted towards urgency than suitability.

Beyond the issue of urgency, in the literature on criteria used in the allocation of scarce health care resources, ability to benefit from treatment has also been put forth as an important criterion for selection (Varekamp et al., 1998). All of the clinicians in the naturalistic setting agreed that the scale could be further developed and emphasised the possibility of the development of a
'suitability' subscale or item. One way of conceptualising the distinction between suitability versus urgency is to consider the dichotomy in terms of the clients potential to benefit from psychotherapy versus the clients potential to decline in level of functioning whilst waiting for psychotherapy. Given that the CPRS measures urgency as well as level of severity, the scale is particularly useful in discriminating between a group of clients who all present with a high level of symptomatology and in this way it is different than global ratings such as GAF.

A further justification for considering suitability is that whilst psychotherapy is generally considered as therapeutic, it also has the potential to harm and indeed, is simply inappropriate for certain disorders (Mohr, 1995). Hence, an important justification for assessing clients for psychotherapy, is to determine within the limitations of the assessment process, a client's broad suitability for psychotherapy. In addition, clients who are determined to seek out treatment are not necessarily the clients who will benefit most from it, or who represent the most important target group. Hence, a client's suitability for treatment is an important consideration in determining the most appropriate categories for triaging clients referred to a highly demanded service.

On the CPRS, most of the items are weighted towards urgency rather than suitability since little published research exists on how to measure these constructs. Hence, inclusion of a scale of suitability is rather difficult since while many therapists may comment that clients present with different abilities to 'use' therapy, prediction of outcomes of psychotherapy has proven to be notoriously difficult (Luborsky et al., 1988). In general, 'suitability' remains an ill defined construct. The term may be used to refer to a number of aspects of the client's presentation including their ability to be engaged, to collaborate, to reflect on their situation, to express
themselves or to bring with them to therapy realistic expectations of therapeutic goals. For example, a client may be prioritised as being of high level of need for treatment, yet, if their expectations of therapy are incongruent with therapy goals, it is likely that the process of therapy will be experienced as frustrating and non-rewarding to both client and therapist and may lead to premature termination. Hence, further research into this issue is implicated.

CPRS score was found to be significantly correlated with a measure of working alliance, the Working Alliance Inventory (WAI). In particular, it was found that CPRS score was significantly correlated with the Task and the Goal subscale of the WAI, but not the Bond subscale. One interpretation of this finding is that those with lower CPRS scores were more able to work on the tasks of therapy and have clear agreement of the direction of therapy. In other words, they may have been more able to 'use' the therapy provided.

5.3 PRACTICAL IMPLICATIONS FOR PSYCHOLOGICAL SERVICES

5.3.1 Longer times on waiting lists for those who are prioritised lower

In summary, the findings suggest that those with a greater level of psychopathology were more likely to have been assigned a higher CPRS score. In turn, those with a higher CPRS were less likely to have progressed over therapy, than those assigned a lower CPRS score.

In the literature on health care, the queue is the most common metaphor to explain the dynamics of waiting lists, whereby patients are being treated one after the other (Pope, 1991). Such a metaphor accords with the premise of procedural justice that everybody should wait one's turn. In the situation of triage, the metaphor needs to be extended such that the order in
the queue is constantly re-evaluated and those considered more in need, may be moved closer to the front of the queue and some remain constantly at the end of the queue.

The present study focused on the use of a triage protocol to manage a waiting list for psychotherapy. There are several risks in using such a prioritisation system. For example, those identified as medium or low need may be continually passed over by high urgency cases and hence, will have to endure a very long waiting period. In this way, the design of the scale actually reinforces severe behaviour, i.e., if someone is coping well and is perhaps more suitable, then they become a lower priority.

A further implication of this is that whilst high priority clients at an acute level of psychological distress will be seen more quickly, this is at the expense of those clients prioritised less highly, who may be better able to make immediate use of therapy. As such, one concern about the CPRS, as it stands, is that some clients who are given a low priority score may remain permanently on the waiting list, despite potentially having better outcomes. This may lead to a situation where therapists are constantly faced with difficult and peer prognosis cases and miss out on the rewards of seeing easier patients improve. In this scenario, the likelihood of burnout is increased.

As discussed previously, the utility of the CPRS is somewhat dependent on the individual goals of respective services. Some services may seek to select those who are more likely to have the greater treatment outcomes, whilst others may prioritise those clients considered most vulnerable, whilst others will attempt to balance these objectives.
5.3.2 Alternate solutions to dealing with waiting lists

In an area where demand will always outstrip supply, primary care mental health must develop approaches designed to achieve the best compromise between the quantity of patients treated and quality of service provided. McPherson (1998) reports that there is a danger of developing short-term strategies where the primary focus is simply to ‘deal with that waiting list’. Whilst management of waiting lists is clearly important, services should also be striving to better meet the needs of the population seen at the primary care level. Bearing in mind the limited resources that will always pertain in primary care mental health, alternate solutions need to be explored in order to help those in need of mental health care. There has been a growing international consensus that therapists need to develop innovative long-term approaches in order to deal with these problems (see White, 2000).

There is growing interest in exploring ways in which limited clinical time can be used to the benefit of more clients (Stallard & Sayers, 1998). White (2000) has suggested that in planning service provision, clinical psychology has failed to take into account the unique problems in primary care, such as lengthy waiting lists. He claims that there remains too much emphasis on one-to-one treatment in primary care when alternative strategies, e.g., group work, self-help and preventative strategies would, in the long run, provide a better service to patients. Interest has also been stimulated in brief psychotherapy as a way of utilizing existing resources to meet more of the current unmet need and thereby reduce waiting lists (Cummings et al., 1998; Stallard & Sayers, 1998). Proponents of brief therapy argue that it is a viable response to scarce resources. Cummings and colleagues have found that if psychotherapists are trained in short-
term as well as long-term therapies, approximately 85% of patients responded to therapy in less than 15 sessions (see Cummings et al., 1998).

5.4 METHODOLOGICAL ISSUES AND DIRECTIONS FOR FUTURE RESEARCH

5.4.1 Limitations of the scale

The subscale of Suicidality is heavily weighted in the CPRS, such that the scale appears to be prioritising more highly those who are highly suicidal and for whom crisis intervention may be more appropriate. Indeed, the current items geared towards prioritising highly, may be in opposition to what is necessary for psychological change. As such, a high score might indicate that psychotherapy is inappropriate at that time and that crisis intervention may be more appropriate. For example, the person may need to focus on dealing with social factors in their environment or may need to engage in skills based training to tolerate levels of distress. In other words, a high score may indicate the need for intense crisis management.

Given that there does appear to be a subset of clients who are in such an acute level of crisis that they are unable to make use of psychological therapy at the time of referral, it would appear useful to derive a cut-off score that would help to identify those persons too acute to be able to benefit from psychotherapy at that time. Due to the small sample size in this study, it is not possible to propose an empirically based cut-off score. Future research could investigate whether cut-off scores could be used to identify clients that require more urgent interventions than standard weekly psychotherapy consultations. In addition, it would be beneficial to trace the outcome of those clients who drop off the waiting list before beginning treatment as well as those who prematurely terminate treatment.
The scale was designed by clinicians and not by psychometricians. As such, the justification for the number of items and the various weightings of the subscales was based on clinical judgement. Items were weighted so that more severe indications are higher scores. Further the assignation of weights was made by clinical judgement; for example, more weight is given to Severity (part B, highest possible score = 3) than for example, Availability of Interim Care Options (part D, highest possible score = 2). For the purposes of this research, the scale was examined at face value, however, future research is needed to measure psychometrically appropriate weightings for each of the scales.

Given that the CPRS was found to be strongly related to a number of measures, including Global Assessment of Functioning (GAF), it is important to ask whether the CPRS makes a unique contribution beyond measures that are currently available. The CPRS contains items that measure constructs aside from severity only, including ability to wait and availability of other resources. As such, it is anticipated that these items have additional utility in the task of triage. However, it is beyond the scope of this thesis to answer that question in more detail and as such, it would be beneficial to empirically seek the answer in future research.

The CPRS is a generic scale which was designed to use as a triage protocol in general clinical settings. Its utility in more specialised clinical situations is not known. In such settings, the scale may require modifications in order to match the clientele. Further, instructions for the specific content of clinical interviews in order to score the CPRS have not been derived. Hence, a future research initiative may be to develop an interview schedule that specifically probes for relevant items on the scale (e.g., Availability of Interim Care Options).
5.4.2 Limitations of the studies

Decisions about the effectiveness of the CPRS rely on the purpose of the scale and the goals of therapy itself (see Tantum, 1995). As such, whilst, it may be stated that the CPRS was effective in spreading clients on a continuum on the waiting list as well as identifying those as most severe and most urgent, it is not possible to definitively claim that use of the tool leads to better decision making about selection of clients from a waiting list. Such claims will be dependent on the identified purpose of the scale and the goals of the therapy.

In both settings, relatively small sample sizes were utilised. The risk of Type I errors should also be acknowledged, given the exploratory nature of the design and the large number of correlations completed (Cook & Campbell, 1979). In the first study, clinical vignettes were used to assess inter-rater agreement. There is literature to suggest that the use of written vignettes or information obtained from case summaries is less reliable than rating actual clients and that data obtained from case vignettes cannot be directly generalised to client populations (see Maher, 2003). Hence, estimates of inter-rater agreement are likely to be inflated due to the method used of examining inter-rater agreement. Rating actual clients means that there is more information to sift through and greater complexity, than use of written vignettes. However, the interview situation also provides opportunities to check and refine ratings. In addition, the therapeutic interaction provides the opportunity to determine if the client is able to work collaboratively with the therapist and hence, gives the therapist an indication of the client’s ability to make use of therapy. Suggestions for future research examining inter-rater agreement may include the use of taped interviews or assessments which are duplicated or triplicated with consenting clients. This issue clearly warrants further investigation.
In the second study, ratings of an independent rater were examined for strength of reliability with the primary rater. It was found that overall there was good reliability. Hence, whilst the CPRS was designed to be used as a triage tool following a standard clinical interview, further research may be able to further validate and/or refine the scale for use as a rapid screening tool.

In the naturalistic setting, at the time that the study was completed, not all clients had completed treatment and hence, the subgroup of clients included in the analyses that had been prioritised using the CPRS and who had both entered and completed treatment was relatively small. In addition, in the naturalistic setting, clinicians made ratings of initial level of functioning and perception of outcome, hence, this data was subject to clinical bias. The second study attempted to overcome these limitations, by adopting more sound psychometric tools.

In the research setting, persons were assigned to therapists within a few weeks of being assessed and hence, in that setting, waiting times were not an issue. As such, it would be useful to examine the CPRS in another naturalistic setting where more rigorous outcome measures are utilised. More systematic research may involve a randomised controlled trial where one group is prioritised using the Client Priority Rating Scale and compared with another group using standard systems of triaging waiting lists or with clinical judgement alone.

In considering future research, it would also be beneficial to compare the performance of the CPRS with alternative tools such as Global Assessment of Functioning (GAF) ratings. The GAF is a global measure of severity and in this it shares some similarity to part of the CPRS, but it does not rate need or urgency relevant to triage priority assignment. Nonetheless, future
research is warranted to examine the extent of the additive component of the CPRS over and above GAF ratings. In summary, this thesis has examined use of the CPRS as a sole method of triaging clients, however, future research needs to compare multiple systems of determining level of priority.

There is clearly a need for further research investigating how best to prioritise patients waiting for psychotherapy. In developing other measures or extending on the CPRS, more attention needs to be paid to the balance between urgency and severity with ability to benefit. Our results suggest that the most urgent clients often do not make use of offered psychotherapy, whereas less urgent cases were more likely to be engaged and retained in therapy. Nevertheless, the problem remains that as the heavy demand for psychotherapy services frequently leads to long waiting lists, there is arguably a need for the further development of a scale that has the capacity to both efficiently and fairly triage clients who are waiting.

In developing or modifying a triage protocol, Tobin et al. (2000) stressed the importance of involving mental health service managers, intake clinicians and consumer representatives to ensure that decisions are both practical and achievable. They also stressed engagement of clinical staff (by providing opportunities to comment on successive drafts of the documents) to be essential. In short, the process requires continuous feedback and engagement in the development of clinical practice guidelines in order to facilitate the move from individualistic and autonomous clinical practice to provision of a service with greater reliance on standardisation.
5.5 CONCLUSION

This thesis was intended as a preliminary investigation into the area of triage in psychotherapy, since no research has been conducted in this area, to date. There are many complex issues in triage and consistent with the status of this thesis as an introduction to the area, more issues have been raised than answers have been provided. Clearly, more research needs to be conducted to evaluate the scale, including psychometrically investigating the assignation of weights to each dimension and employing larger sample sizes. In conclusion, the CPRS appears to be one method of reliably prioritising clients on a waiting list for psychotherapeutic services.
REFERENCES


APPENDIX A

Front sheet of published article:

Assessment Prioritizing Access to Psychotherapy Services: The Client Priority Rating Scale

Carla J. Walton and Brin F. S. Grenyer*
Illawarra Institute for Mental Health and Department of Psychology
University of Wollongong, Australia

Determining who gets priority to psychotherapy services within budget-limited health services remains a dilemma. This study set out to investigate a new method of triage using the Client Priority Rating Scale (CPRS). Clinicians made weighted ratings in the domains of Suicidality, Severity of Presenting Problem, Strength of Internal Coping Resources, Availability of Interim Care Options and Possible Negative Impact of Waiting. The total score was then used to prioritize waiting times for psychotherapeutic services. In order to assess its utility, 68 clients who had been assigned CPRS scores were studied. The CPRS was found to have good inter-rater reliability and internal consistency. As predicted, those with higher CPRS scores were significantly more likely to commence psychotherapy treatment before those with lower scores. CPRS score was also significantly related to diagnosis and social and psychological functioning. The CPRS method of triage is one approach that determines priority for clients seeking psychotherapy services. Copyright © 2002 John Wiley & Sons, Ltd.

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APPENDIX B

Mental Health Outcomes and Assessment Training (MH-OAT),

NSW state-wide Triage protocol
T1: TRIAGE

Service Unit: ______________________
Facility: ______________________

PLEASE USE GUMMED LABEL IF AVAILABLE

SURNAME

OTHER NAMES

ADDRESS

DATE OF BIRTH M.O.

Date: ___ / ___ / ___
Arrival Time: ______:
Time Seen: ______:

To be completed at time of presentation to service

ATSI  □ ABORIGINAL □ TORRES STRAIT ISLANDER □ BOTH □ NEITHER □ NOT STATED

INTERPRETER REQUIRED? □ NO □ YES PREFERRED LANGUAGE: ______________________

1. SOURCE OF REFERRAL

Referral source:
- [ ] Self
- [ ] Psych Hospital
- [ ] ED
- [ ] Private Hospital
- [ ] GP
- [ ] Area MH Inpat
- [ ] Outpatients
- [ ] Hosp same AHS
- [ ] Family/Friend
- [ ] CMH service
- [ ] CHC (gen)
- [ ] Hosp other AHS
- [ ] Priv Psychiatrist
- [ ] Crisis team
- [ ] Nurs home
- [ ] Type change
- [ ] Police
- [ ] Other (specify)

Referrer Details:
- [ ] Other (specify)

Name: ______________________
Telephone No: ______________________

2. TRANSPORT (tick all that apply)

- [ ] Mental Health Team
- [ ] Community Health
- [ ] Ambulance
- [ ] Community Health Team
- [ ] Friend/Family
- [ ] Unaccompanied
- [ ] Other Mental Health Worker
- [ ] Other Worker (specify)

3. LEGAL STATUS

- [ ] Unknown
- [ ] Voluntary S12(t)
- [ ] Temporary
- [ ] Community Counselling Order
- [ ] Community Treatment Order
- [ ] Admit on CTO breach
- [ ] Community Treatment Order
- [ ] Transfer S78
- [ ] Voluntary admit on CTO
- [ ] Forensic
- [ ] Forensic to conditional S89
- [ ] Other Legal Status (specify)

4. REASONS FOR REFERRAL

- [ ] Police
- [ ] Unknown
- [ ] Criminal Procedures Act
- [ ] Inebriates Act
- [ ] Children and Young Persons (Care and Protection) Act 1998
- [ ] Bail Conditions
- [ ] Guardianship Order
- [ ] Criminal Procedures Act
- [ ] Guardianship Order
- [ ] Children and Young Persons (Care and Protection) Act 1998
- [ ] Bail Conditions

Recent Suicide Attempt □ No □ Yes
Recent Self Harm □ No □ Yes

5. NATURE OF CURRENT PROBLEM

- [ ] Urgent Family/Domestic Issues
- [ ] Recent Suicide Attempt □ No □ Yes
- [ ] Recent Self Harm □ No □ Yes

6. RECENT SUBSTANCE USE: (Past 3 days only)

<table>
<thead>
<tr>
<th>Substance</th>
<th>Alcohol</th>
<th>Sedatives</th>
<th>Cannabis</th>
<th>Drugs</th>
<th>Becontinuer</th>
<th>Halucinogens</th>
<th>Hallucinogens</th>
<th>Stimulants</th>
<th>Relaxants</th>
</tr>
</thead>
</table>

* Hours since last used (within past 3 days)

Name: ______________________
Signature and Date: ______________________
Designation: ______________________
7. OBSERVED BEHAVIOUR AND APPEARANCE

☐ Depressed ☐ Anxious ☐ Intoxicated ☐ Dishevelled
☐ Withdrawn ☐ Agitated ☐ Threatening ☐ Disoriented
☐ Suicidal ☐ Irritable ☐ Violent ☐ Thought Disorder
☐ Mute ☐ Suspicious/Paranoid

8. PREVIOUS SPECIALISED TREATMENT/HISTORY

Previous Psychiatric Disorder ☐ No ☐ Yes ☐ Unknown
☐ No prev MH Rx ☐ MH Inpat/no MH amb ☐ MH amb/no MH Inpat ☐ MH amb & MH Inpat ☐ Unknown

(Include dates and locations of previous contacts with Mental Health Services)

9. CURRENT MEDICATION

Taking Psychiatric Medication ☐ No ☐ Yes

10. PROBLEMS

1. ____________________________

2. ____________________________

3. ____________________________

☐ Depression ☐ Substance Withdrawal ☐ Somatoform problem ☐ Mental Retardation
☐ Anxiety/Agitation ☐ Delirium ☐ Eating disorder ☐ Situational crisis
☐ Intoxicated/Substance Use ☐ Psychosis ☐ Mania ☐ Other

11. RISK STATUS

HARM TO OTHERS Low ☐ Medium ☐ High ☐ Extreme ☐ Comments

HARM TO SELF Low ☐ Medium ☐ High ☐ Extreme ☐ Comments

SUICIDE Low ☐ Medium ☐ High ☐ Extreme ☐ Comments

ABSCONDING ☐ ☐ ☐ ☐

12. TRIAGE SCALE

1. Category 1: Immediate Intervention
2. Category 2: Constant Observation
3. Category 3: Close Observation
4. Category 4: Periodic Observation

13. OTHER COMMENTS OR ACTIONS:

Triage By: ____________________________ Signature: ____________________________

Time completed: ___________ Date: ___________ / ___________ / ___________
APPENDIX C

Client Priority Rating Scale (CPRS)
THE CLIENT PRIORITY RATING SCALE (CPRS)

Following an intake interview, please rate the client on the following variables. The total score becomes the rating of priority used for managing the waiting list of the service.

A. SUICIDALITY
i. Stress
   The presence of a personal event that is experienced by the client as an intolerable loss or crisis which is triggering the suicidality.
   No [0] Yes [1]

ii. Symptoms
   Changes in behaviour, physical condition, thoughts or feelings.
   No [0] Yes [1]

iii. Thoughts of Suicide
   No [0] Yes [1]

iv. Current Plan
   No [0] Yes [1]

v. Prior Suicidal Behaviours
   History of own attempts, history of others attempts
   No [0] Yes [1]

vi. Resources
   Personal support systems, job, money, home, friends, family
   Good [0] Satisfactory [1] Poor [2]

Suicidality Total Score

B. SEVERITY OF PRESENTING PROBLEM
   Mild (1) Moderate (2) Severe (3)

C. STRENGTH OF INTERNAL COPING RESOURCES
   Good (0) Satisfactory (1) Poor (2)

D. AVAILABILITY OF INTERIM CARE OPTIONS
   Yes (0) Present but unsatisfactory (1) No (2)

E. POSSIBLE NEGATIVE IMPACT OF WAITING
   i. Significant deterioration of mental health
      No [0] Yes [1]

   ii. Loss of openness to psychological intervention
      No [0] Yes [1]

   iii. Risk of self harm / harm to others
      No [0] Yes [1]

   iv. Previous history of difficulty accessing services
      No [0] Yes [1]

   v. Anniversary reactions an aspect of presentation
      No [0] Yes [1]

Possible Negative Impact Total Score

TOTAL PRIORITY SCORE

The Client Priority Rating Scale was devised by Shirvington, P., Innes, D., Jordan, C., & Kuter, P.
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