

About FACE: the applications of a structured approach to mental health information

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Abstract

This article describes the Functional Analysis of Care Environments (FACE), and demonstrates some of its' applications in mental health services. FACE is a recording and measurement technology designed to integrate clinical and management information. Its major features are a multi-axial framework and measurement tools for assessment and outcome recording. Structured information about mental and physical well being, social circumstances and environmental functioning was recorded for 520 clients receiving either 'assertive' or 'community' forms of mental health care. The information generated formed the basis for comparison between clients, identified significant differences between the two client groups, and highlighted treatment effectiveness.

Introduction

In an attempt to deliver care in a more efficient, effective and equitable manner, health care services are adopting practices that have been successful in other industries. Accordingly, many health care organisations are recognising the importance of information technology to meet their clinical and administrative needs. Information technology can act as a connective tissue (Currie 1996), with which to disseminate and integrate knowledge derived from numerous sources and perspective's - in order that this can be used as a coherent whole.

The 1990's saw a number of developments in health information, some of which have been outlined by Reid (1999). This article describes another development in health information technology - the Functional Analysis of Care Environments (FACE) recording and measurement system, and demonstrates some of its applications in a mental health care service.

Clinical Information Management

Access to appropriate information is central to decision making. Whilst there is a wealth of information available about the clients of mental health services, that knowledge is often difficult to retrieve. Casenotes, which hold the majority of information about clients, provide clinicians with the flexibility to capture circumstances unique to the individual. However, the format binds the richest information source about a client to a single location, although most of our clients live in the community and utilise different parts of the mental health service network.

The type and extent of information recorded in casenotes varies enormously dependent on professional background, service setting, and the experience of a clinician with a particular set of problems. Psychological, social or functional difficulties are appraised in the absence of benchmarks, and what is considered 'very severe' by one service or professional may be viewed as a 'moderate' problem by another. For these reasons case-note information is often time consuming to access, inconsistent across clients, and difficult to interpret or use for comparative purposes.

The inability of health care professionals to rapidly access consistent and up to date information does not assist in improving service delivery:- Professionals do not have access to information which can support their decision making, or a platform to integrate their expertise with others outside their immediate working environment; consumers are repeatedly asked the same questions as they move between care environments; and health care providers and policy makers do not have appropriate data to evaluate treatment programs, or inform policy development and resource distribution.

A more sophisticated method to manage and utilise knowledge is required in order to capitalise on the intellectual property of clinicians - who are not always available. Ideally, community health services require an adaptation of the 'ATM' tailored to our requirements, allowing health and social information from multiple sources to be deposited, updated, and withdrawn as required. The 'currency' of that knowledge should be consistent across the health system, so that information from different professions, service sectors or stakeholders can be integrated, and invested in long term 'knowledge bearing' accounts which can be utilised for many purposes.

The National Mental Health Policy (Australian Health Ministers 1992) recommended the development of co-ordinated information systems and the introduction of routine outcome measurement. Our experiences had taught us that unless clinical staff consider that the information they are asked to collect is of clinical relevance and assists them in the delivery of care, they are unlikely to incorporate that process into their clinical practice.

Information systems presently available serve administrative rather than clinical functions. Outcome measures such as the Health of the Nation Outcome Scale (Wing et al. 1996) are often too brief to represent individual circumstances in a meaningful way, or capture the relatively small changes in psychological or social functioning achieved in a community setting (Brooks 2000). As very little of this information is either accessible or relevant to clinicians, to collect it is considered a burden rather than a useful resource.

Mental health professionals require rapid access to information about individuals and groups of clients. This information must be clinically relevant, satisfy the reporting requirements of a multi disciplinary environment, and meet the needs of different service components and diagnostic groups. At a basic level these include medico-legal reporting and the identification and documentation of risk. An optimal system would also assist clinicians by providing decision support tools and assistance in generating treatment care plans.

To enhance efficiency and reduce duplication and waste, information systems should be designed to ensure that the collection of outcome measures occurs as a by-product of the clinical process, rather than an additional requirement. Ideally therefore, the format will automatically generate data that can be used to develop practice guidelines, determine benchmarks and clinical indicators, and identify system performance.

In searching for a tool which could address these multiple requirements, we identified the Functional Analysis of Care Environments (FACE) developed by Paul Clifford in the United Kingdom (Clifford 1995a).

Functional Analysis of Care Environments (FACE)

FACE is a recording and measurement system for health and social care. The fundamental principle underlying its design is to integrate management and clinical requirements in a single, easily intelligible approach to information (FACE Recording and Measurement Systems Inc. 2000). FACE provides an information platform whereby clinical staff can intuitively and consistently record client details in a way that facilitates systematic collection of clinical and treatment data.

The recording system is based on a framework designed for both clinical and social assessment and measurement. The system contains over 20,000 data elements, organised in a logical, tree-like structure. These

relate to; Current condition (psychological, physical, functional); Personal social and medical history; Interpersonal functioning and support networks; Other social and personal circumstances (including accommodation, employment, guardianship, language, barriers to care); Diagnosis (DSM-IV, ICD-10); Risk to self and others; Treatment plans and interventions (including medication); and Care environments.

FACE consists of three integrated components; Knowledge Base, Tools, and Technology. The 20,000 items, definitions and qualifiers built into the FACE information system can be used to document specific or global information about individuals or groups of people. This knowledge base can be conceived of as a comprehensive data-pool of conditions, circumstances and activities relevant to any area of care, akin to a compendium of assessment elements and outcome measures from multiple disciplines. For instance, medical professionals can record the type and dosage of pharmaceuticals, whilst an occupational therapist can document difficulties in dressing. This knowledge can be used in many ways; - A clinician can identify what interventions have been successful for a specific problem or diagnostic group, or identify the relationship between patterns of service delivery and clinical outcome.

Assessment tools allow users to record clinical information, offering precise guidance on ratings of severity. Assessments can be tailored for specific treatment settings or clinical populations, whilst retaining core items common to each environment or group. Client assessments allow service users to document their perspective of their circumstances and satisfaction with care, and facilitate their involvement in the treatment process.

Care planning tools provide assistance to develop and review treatment plans, and record details about the treatment provided. Treatment goals are identified, and clinicians specify how these goals will be met - the type, frequency and duration of intervention. They can then track if progress has been made in achieving treatment goals.

Reporting tools allow information to be summarised, integrated, and reported on. For instance, severity scores can be generated on individual items and on dimensions, which can then be used to prompt decisions about treatment. The outcome of treatment can be analysed on either an individual or population basis.

The measurement and recording system is accompanied by technology that allows all information to be recorded and electronically transmitted. This ensures that information is readily available to any authorised person who requires it. Ultimately, the aim of the FACE measurement and recording system is to become a core component of an electronic health record. More widely, FACE information could form the health and social component of a person-based record spanning health and social care, education, and human and disability services.

FACE was developed by Paul Clifford from the Centre for Outcomes Research and Evaluation (CORE) in the United Kingdom, supported by funding from the Department of Health (UK). An early version of the approach was applied to obstetrics and gynaecology in 1989. In 1990 work commenced to apply the FACE approach to mental health, and in 1993 FACE was adopted by the Department of Public Health Information Strategy. Validation of the FACE approach in a mental health context occurred during 1993-1996. Analysis of assessment data from 6,000 clients covering all mental health populations indicated that the assessment style, scoring and aggregation of data were valid and reliable. Additional work demonstrated acceptable inter-rater reliability (Clifford 1995b 1997).

In 1997, FACE was piloted as an outcomes system for mental health services in the United Kingdom. Paper based versions of assessment tools are now in use in 60% of mental health services in that country. Adaptations were made to utilise FACE in the United States, and a networked computerised version has been adopted by the Menninger Clinic (Graham 1997).

The Pilot Study

A Pilot study was conducted to evaluate the use of FACE assessment information and computing software in a community mental health service. The introduction of information technology represents a culture change, and requires a computing infrastructure that did not yet exist in many parts of the mental health service network in South Australia. In this environment, a full introduction of the FACE approach was overly

ambitious. The scope of the pilot study was therefore modest. Evaluation concentrated on several assessment tools, in particular a clinical assessment known as the 'Adult Mental Health Form', and the capacity of these assessments to provide meaningful information. We did not attempt to introduce the total range of data elements relevant to mental health, nor the Care Planning tools.

Each FACE assessment tool utilises a common conceptual framework. Assessments cover both the physical and psychological health status of the client, and their social and interpersonal circumstances and functioning. The assessment model, depicted below, was designed to accommodate the varying theoretical perspectives of different professional groups. There are 6 assessment 'Axes', broken down into 10 'domains'.

Figure 1. FACE Assessment Model



The 'Adult Mental Health Form' is a way of representing the health and social circumstances of adults who have a mental illness. It consists of a subset of FACE data elements relevant to that population, grouped according to the model presented above.

The tool is a compromise between specificity and practicality. It includes around 70 items that encompass the level of detail reasonably available to the clinician upon initial assessment of a client or patient. A qualifier rated on a 5-point scale from 'no problem' to 'very severe' problem accompanies each item or area of assessment. A detailed set of anchoring points exists for every item to guide clinicians in rating severity. These are based on the frequency, severity, duration and context in which the behaviour or circumstance occurs. A text field accompanies each item, to emulate the flexibility of a case-note.

The Adult Mental Health Form generates an overall severity score, and a score on each of 10 assessment domains (such as 'social circumstances', 'risk', or 'behaviour'). Analysis can also be conducted at the micro (or item) level, to identify changes in specific areas of functioning.

This approach ensures that a minimum level of clinical detail is collected about every client. As more information becomes available, this detail can also be recorded by using other data elements in the FACE hierarchy, dependent on the nature of the client's circumstances, and the clinical focus of the professional.

Two client assessments were also utilised. The 'How Are You' questionnaire consists of 57 items which allow the client to describe how they have been feeling, and their impressions of their daily life and circumstances. 'How Are You' results in an overall severity score, and can be broken down into 6 domains, which are broadly similar to those assessed from the clinical perspective in the 'Adult Mental Health Form'.

'Your Treatment and Care' is a measure of satisfaction with service. This questionnaire asks the client about different aspects of the care they receive. Questions include whether the client knew what their medication was for or its' possible side effects, their knowledge of their care plan, whether they had received sufficient information about their problems, and the extent to which they can talk to clinicians about their problems, or receive practical assistance.

The Pilot study was undertaken in 3 phases over a period of 18 months, commencing in January 1999. In Phase 1, the 'Adult Mental Health Form' was applied to the clients of a mobile assertive care team to assess its clinical effectiveness (under working conditions) and usefulness as a measure of outcome, and whether the method was acceptable to clinical staff. A second aim was to determine the feasibility of introducing information technology in this environment.

During Phase 2, the approach was adopted by 2 other services - a second Mobile Assertive Care (MAC) Team, and a Community Care and Consultation Team (CCT). The aim of this phase was to demonstrate how FACE data could be used to undertake a comparative analysis of the type and severity of dysfunction in three different teams.

In Phase 3, we extended the range of FACE tools being utilised by the initial team, who by this time had been using FACE for a 12 month period. Clients completed 'How are You?' and 'Your Treatment and Care'. Information generated by FACE was combined with administrative data to provide an in-depth informational overview of a single team, and contrast the perspective of the client and clinician.

The timing of the introduction of the FACE computing software and use of assessments is outlined in Table 1. A stand-alone version of the FACE data computing software was installed on a single computer in each service. Once training had been completed in each team, clinicians completed an Adult Mental Health Assessment on each of the clients in their current caseload, entering their observations directly onto the computing software.

The software package comprised of a data entry tool, into which assessment information could be entered, and a reporting tool known as the outcomes browser. The outcomes browser generates graphs and summaries of the assessment information, and enables staff to develop profiles of individuals and groups of clients.

Training occurred on a team by team basis. Each team received 4 sessions - three group and one face-to-face intensive. The initial session provided an overview of the FACE approach to information and its conceptual foundations. This was followed by training in the use of the Adult Mental Health form. A clinical vignette was used to familiarise clinicians with severity rating and encourage reliability of rating. Each clinician then received a 90-minute individualised training session in the use of computing software, during which an assessment on a real client was completed. Follow-up support was provided by telephone, and through regular visits to each site. Finally, after assessments were completed on all clients in each team, a further group session focussed upon the application of assessment information to clinical practice.

Table 1. Pilot implementation phases

Team	Start Date	Staff	Assessment Type	Clients	End Date
Phase 1					
MAC (1)	Jan-99	7	Adult Mental Health Assessment (initial)	60	May-99
			Adult Mental Health Assessment (repeat)	50	Jul-99
Phase 2					
CCT	Aug-99	12	Adult Mental Health Assessment (initial)	372	Feb-0
MAC (2)	Sep-99	7	Adult Mental Health Assessment (initial)	68	Nov-99
Phase 3					
MAC (1)	Dec-99	7	Adult Mental Health Assessment (initial)	80	Mar-00
			Adult Mental Health Assessment (repeat)	62	Mar-00
			How Are You	47	Dec-99
			Your Treatment and Care	47	Dec-99

The project team down-loaded assessment information from each site and amalgamated data into a single database for analysis. Collection of data occurred after every client in each team's caseload was assessed; however the assessment process was ongoing. Each team continued to collect FACE Adult Mental Health assessments for new episodes of care. Therefore, by the time Phase 2 was completed, the 1st MAC team had collected assessments on 77 persons.

Results

During the first phase of the pilot program, 60 clients from a Mobile Assertive Care Team (MAC) were assessed using the 'Adult Mental Health Form'. 50 clients were re-assessed between 3 and 5 months later.

On completion of this phase of the pilot, the team was able to provide a profile of their client group, and indicate where treatment was having the most impact. The profile was based on systematic assessment details, and could be represented graphically and statistically. Previously, profiles were based upon descriptive or narrative style information only.

The group experienced most difficulty in the areas of 'Activities of Daily Living', 'Interpersonal Relationships', and 'Response to Care' (consisting of compliance with medication and engagement in the treatment process). These were also the areas in which treatment had the most impact. The fact that the bulk of client assessments were not conducted at the commencement of the MAC team involvement limits the conclusions that can be drawn. Intake assessment information is required to accurately depict outcomes achieved throughout the entire treatment episode. Nevertheless, the assessment data provided a description of the MAC client population.

Interviews were conducted with each staff member to evaluate their perception of the computing software, and appraisal of the Adult Mental Health Form. Whilst use of the software was initially challenging, problems experienced were overcome with time, after which the program was considered straightforward to utilise. Clinicians felt that the information collected by the Adult Mental Health Form accurately reflected their clinical judgement, and correctly identified areas in which change had occurred. This assessment required an average of 15 minutes to complete. The results of this phase of the work supported a further rollout of the FACE information approach and computer software, and indicated that this was feasible despite the limited computing experience of some staff.

In Phase 2 of the pilot project, a second MAC team and a Community Care and Consultation (CCT) team completed Adult Mental Health assessments on their caseloads, which numbered 68 and 372 respectively. This data was combined with that from the first MAC team, which by the conclusion of this phase had increased to 77. Assessment information was available on a total of 517 clients. The group represents 30% of all adult mental health clients in the Southern region of Adelaide, accounting for 45% of all service contacts provided by that region in the six-month period from July to December 1999. This phase of the pilot aimed to demonstrate how FACE assessment information could be used to develop a profile of clients attending different services, and identify differences between these groups.

CCT and MAC services each consist of multi-disciplinary staff who adopt a clinical case management role in service provision. CCT teams serve the majority of clients receiving long term care in the community. Caseload size is 1:25-35 and clients have approximately 1 to 2 contacts a month with their case manager. These services operate Monday to Friday, between 9am to 5pm.

Mobile Assertive Care provides a more intensive service to clients in the community with substantial and prolonged psychiatric disability. This group is prone to relapse, and have a wide range of psychosocial rehabilitation needs. Caseloads are relatively small (1:7-12) to enable clients to receive 2 to 3 visits per week where required. The MAC service operates 7 days a week, between 8am to 9pm.

FACE assessment information indicated that MAC clients had significantly higher overall severity scores than did CCT clients. At the domain level MAC clients were rated as posing significantly greater risk to themselves and others in comparison with CCT clients, and had significantly higher severity scores for behaviour, cognition, mental health, and physical health. MAC clients also had significantly higher scores in the domains of social circumstances, activities of daily living, and response to care than CCT clients. The only domain in which the two groups did not differ was interpersonal relationships (Table 2).

At the item level, despite significant differences in the aggregated domain scores, there were a number of areas in which the two client groups did not differ. Within the Mental and Physical Wellbeing component of the assessment, MAC and CCT teams had similar ratings on suicidality, dissociation or other perceptual abnormalities, somatic preoccupation, sleep difficulties, or distress and pain caused by physical condition. In Social Environment and Functioning, the ability to undertake activities of daily living outside the home, the availability of daytime activity, and access to social contacts and amenities/health and social services was not significantly different between the two groups.

Clients from the two MAC teams were not significantly different from one another in overall severity, or in any of the assessment areas.

Table 2. Domain Scores by Service Type (MAC vs CCT)

Domain	CCT		MAC 1		MAC 2		Total	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Risk	6.3	10.5	15.4	16.1	18.2	14.0	9.4	12.9
Behaviour	13.0	16.9	20.2	21.8	25.7	19.8	15.9	18.7
Cognition	12.2	18.8	18.2	18.7	17.2	14.2	13.7	18.3
Mental health	18.8	13.9	23.9	17.8	19.7	14.5	19.6	14.6
Psychological Assessment	18.4	13.5	25.3	17.2	24.3	14.8	20.3	14.5
Physical health	12.6	14.8	18.6	15.4	15.3	12.9	13.8	14.8
Activities of daily living	24.6	20.0	39.7	18.9	33.1	17.2	27.9	20.2
Interpersonal	37.8	20.4	40.9	19.8	36.8	17.8	38.1	20.0
Social Circumstances	9.0	10.4	14.3	11.9	15.0	13.3	10.7	11.4
Response to care	19.9	22.5	38.1	24.4	35.3	27.0	24.7	24.7
Overall Severity	24.5	13.3	33.7	13.3	30.0	13.8	26.6	13.8

By February 2000, the first MAC team had obtained assessment information for 80 clients, 62 of which had been re-assessed between 3 to 6 months after their initial assessment. In addition, 47 of the client group completed two questionnaires: 'How are You', which provides clients perceptions of how they are feeling, and 'Your Treatment and Care', a measure of service satisfaction. A member of the FACE project team assisted the client group in completing these questionnaires.

In Phase 3, FACE information was combined with administrative data to provide an in-depth overview of the operation of a single team over a 1-year period. FACE assessment data was used to compare the clients' evaluation of their health and social circumstances with that of the clinician, identify what outcomes had been achieved, and evaluate satisfaction with service.

The MAC (1) team provides services to a maximum of 60 clients at any time. Administrative data indicated that 81 clients received care from this team during 1999 (41 males and 40 females). 50% of those clients received services for the entire year. A quarter of the current caseload have been receiving MAC care for between 2 to 3 years. Approximately 35% of the client group have not had a psychiatric hospital admission in the past 2 years.

The majority of the client group has a Schizophrenic disorder, and 25% have co-morbid substance abuse. The average age of onset of mental disorder was 20, and the group, on average, had been receiving some form of community care for 9 years. Most were referred to community services from the major psychiatric hospitals. Very few of the group received assistance for their mental health difficulties from any other source, and the use of General Practitioners was limited and infrequent.

45% of the client group received a visit from the MAC team once or twice a fortnight, and 20% were visited 2 or 3 times a week. 50% of all visits conducted during the year were between 15 to 45 minutes in duration, including travel time.

Within the Mental and Physical Wellbeing component of the FACE assessment, there were 5 items on which the group encountered difficulty. 14 to 25% of MAC clients had moderate to very severe problems with hallucinations, delusions, attention and concentration, anxiety phobias and panics, and sleep disturbance. 50 to 60% of the group were rated as having no problem on other assessment items.

It is in activities of daily living, interpersonal relationships and involvement in treatment and care that the client group encounters the most severe difficulties. In particular, 89% of the group were assessed by clinicians as having problems establishing and maintaining friendships. Two thirds of the group had mild to moderate difficulties in taking care of themselves, undertaking activities in or out of the home, or engaging in appropriate daytime activity. 80% of the group were described as completely unable or highly resistant to work. Of the 18% who were employed, most had moderate to severe difficulties in work performance.

50% of the group lived alone in private, rented or housing trust accommodation. The quality of accommodation was assessed as adequate for 60% of the group. 50% of MAC clients have their finances managed by the public trustee.

Provider and consumer assessments were similar in many respects, however providers place more emphasis on monitoring mental state and compliance with medication in developing treatment care plans. For consumers, establishing friendships and having something to do during the day are more important. Clients perceive their greatest problem as feeling unable to cope when things went wrong. They felt they had only occasionally been in good health or felt ok about themselves, and had difficulty taking care of their appearance, having enough to do during the day, and finding support when they required it.

In the main clients were 'quite happy' with the care they received. The majority of the group knew both what their medication was for, and its possible side effects. 40% of the client group knew what their care plan was, although almost half of the clients indicated they were not involved in drawing up their care plan. More than half did not know when their care plan would be reviewed.

Paired Samples T Tests were used to determine whether there was a statistically significant change in clinical, social or interpersonal functioning between first and second assessment. Overall severity scores were significantly improved from first to 2nd assessments. At the domain level the assessment of risk, ability to undertake activities of daily living, and problems with interpersonal relationships were significantly improved. No significant differences were observed in behaviour, cognition, mental health or physical health (Refer Table 3).

Table 3. Mean Domain Scores at Initial and Follow-up assessments

Domain	Time 1		Time 2	
	Mean	S.D.	Mean	S.D.
Risk	15.30	15.08	9.68	9.38
Behaviour	21.02	19.24	18.39	19.61
Cognition	19.36	17.41	17.05	11.76
Mental Health	24.57	17.23	23.95	18.53
Psychological Assessment	26.28	16.21	24.35	20.70
Physical	20.07	14.46	19.85	13.54
ADLs	40.74	20.48	37.26	31.79
Interpersonal	42.89	20.23	39.11	30.46
Social Circumstances	13.33	11.83	14.13	10.44
Response to care	41.94	25.96	37.30	28.91
Overall Severity	34.74	13.74	32.31	26.12

Discussion

The FACE recording system captured clinical appraisal of behaviour, circumstances and functioning in a meaningful way. The information was based on objective ratings of severity, and was consistent across clients. The reporting format formed the basis for comparison within and between clients, and generated information which allowed each team and others to

- Identify areas in which an individual or group of clients experienced most difficulty
- Compare the severity of individual symptomatology, functional ability and social situation with that of other clients (or groups of clients) across service sectors
- Contrast the perspective of the client with that of the clinician
- Review the progress of individuals or groups of clients
- Evaluate treatment outcome
- Evaluate satisfaction with care

FACE was effective in making the clinical process, which to date has remained largely in the minds of clinicians, more transparent and open to scrutiny.

Mobile Assertive Care clients were significantly more impaired than CCT clients in all respects, with the exception of interpersonal functioning. Early evaluation suggests that the MAC team was successful at reducing risk and problems with interpersonal relationships, and improving skills in activities of daily living.

The lack of local or wide area computer networks limited the extent to which assessment data could be disseminated. Whilst staff in each team had access to assessment information for all clients at that site, this information could not be electronically shared with persons from outside the team (paper-based print-outs of the information could be forwarded to other sites however). These circumstances hampered the cross fertilisation of ideas and techniques.

Limitations

Technology has revolutionised any area to which it has been applied, and often resulted in the rationalisation of jobs. Health care workers may perceive information technology as a threat not just to their job security, but to the provision of adequate human services to a group who have been disenfranchised in our community.

The culture change associated with introducing information technology challenges staff to re-think the way in which they appraise and document client circumstances, conceive of client confidentiality, and share information. It also necessitates the development of computing skills, and overcoming computer phobia, which are difficult to foster in an environment where access to computers is limited.

A more tangible barrier to change is the lack of computing infrastructure across the mental health network. Mental health services have not invested in computer hardware for its staff, nor developed local and wide area networks to connect different elements of the services with one another. As a result, the majority of staff cannot communicate by email, or access information that will support decision-making. Documentation is largely paper based, and communication is undertaken by phone or facsimile, which can prove both time-consuming and frustrating when the major repository of client information lies with a clinician who may be off duty or on the road.

A further hurdle lies in educating clinical staff in order to overcome the belief that the collection of outcome information is secondary to their clinical role. Many clinicians view outcome or contact data as 'statistics', the documentation of which prevents them from undertaking their core business - clinical contact. However the collection of so-called 'statistics' is integral to the provision and improvement of clinical services. The two functions should be considered as equally important. Moreover, FACE represents a comprehensive information system, and should be distinguished from an outcome evaluation tool.

The use of electronic patient records raises major issues in relation to the privacy and security of personal information. Confidentiality and security of personal information in this pilot program was achieved by the use of stand-alone computing systems, ensuring that personal data was only accessible by clinical staff. The Department of Health and Aged Care, the Office of the Privacy Commissioner and the Attorney-General's Department are presently collaborating to develop a legislative framework to promote the considered and strictly controlled use of sensitive information. This legislation will set out principles for the appropriate access, collection, use and disclosure and complaints mechanisms (National Electronic Health Records Taskforce, 2000).

Despite the limitations listed above, the introduction of the FACE measurement and recording approach was achieved in a difficult environment, amidst systemic difficulties. Clinical staff were slow to use this system, due possibly to lack of computing skills or access to computers. As casenotes were still utilised by staff, the collection of FACE assessments presently represents a duplication of their work. Despite this, staff recognised the potential contribution of FACE derived information to improving service delivery.

Conclusions

The FACE Adult Mental Health Form successfully identified differences in the severity of mental health and social difficulties between MAC and CCT teams. It was also sensitive to change over time in the MAC team where two assessments were carried out.

Despite the existence of multi-disciplinary teams, the role of mental health professionals has become increasingly generic. A case-management approach necessitates that professionals undertake to provide many aspects of care, regardless of background or training. The role of psychiatrists in prescribing medication, and nursing staff in administering injections, are possibly the only examples of the preservation of discipline-specific roles. In the MAC team, this approach has been successful in improving the activities of daily living and interpersonal functioning of their clients. However little if any impact has been made in assisting clients with their psychological health - specifically behaviour, cognition or mental health.

The introduction of the FACE measurement and recording system has the potential to improve service delivery by increasing communication and dissemination of information among mental health clinicians. The informational infrastructure provided by FACE facilitates multi-disciplinary functioning by distinguishing between a number of aspects of the clients' health and social situation. The approach also provides for consumer involvement in the process of assessment and care planning, and in the evaluation of service provision. Management and staff can benefit from analysis and research to better utilise resources, and identify areas where education and training is required.

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