On the constructs of quality physiotherapy

Karen Grimmer1, Matthew Beard2, Alison Bell1, Lucy Chipchase1, Elizabeth Edwards3, Ian Fulton1 and Tiffany Gill1

1Centre for Allied Health Research, University of South Australia  2Royal Adelaide Hospital  3Flinders Medical Centre, Adelaide

The quality of physiotherapy services invites evaluation using a range of constructs. These must reflect the needs of different stakeholders and the different elements of the “package” of physiotherapy. Measurement of quality can consider organisation of the service, the way in which care is provided, the way in which information about care is recorded and used for evaluation purposes, and the outcome of care. A clear understanding of the elements of quality is essential for physiotherapists to be competitive by providing consistently effective services. [Grimmer K, Beard M, Bell A, Chipchase L, Edwards E, Fulton I and Gill T (2000): On the constructs of quality physiotherapy. Australian Journal of Physiotherapy 46: 3-7]

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Introduction

Health services are moving rapidly towards being customer driven and evidence based (Sackett et al 1997). Coupled with increasing competition from other health practitioners, these forces are challenging physiotherapists to define, evaluate and demonstrate quality service delivery and outcomes. In particular, physiotherapists need to express their unique blend of science and art in terms with which their customers can identify, and which is demonstrably efficacious. This paper outlines issues that would seem to be germane to the provision of consistently high quality physiotherapy care.

The overarching issue for successful research into service delivery issues appears to be the definition of the “physiotherapy product” (Ovretveit 1994). This involves appropriate classification of presenting problems, risk management, treatment decision-making processes, evidence-based management strategies and their effectiveness, use of measures of outcome that reflect stakeholders’ needs and the cost implications of service delivery models.

Different aspects of the same problem face physiotherapy clinicians, researchers and educators. For instance, first contact status, coupled with changes to advertising regulations, offers clinical physiotherapists previously unavailable opportunities for marketing, but brings a greater need for accountability in service quality, price and availability. Physiotherapy educators are faced with providing evidence-based educational material, and developing strategies to assist students to deal with the changing demands of professional practice. Researchers are challenged with supporting clinicians and teachers, by identifying and testing efficacious methods of management and by validating outcome measures that address the needs of all stakeholders in physiotherapy services.

There are several consumer groups which could be considered to be stakeholders in physiotherapy services. These include the direct recipients of care (patients and their families), providers of care (physiotherapists and their employees), researchers and educators, students, funders (patients themselves or third party payers) and indirect beneficiaries of care (referrers, other health service providers, employers, society etc.). Stakeholders can have different views of quality and ways of measuring it (Beaton 1989, Grimmer et al 1999, Sheppard 1993). A quality “package” of physiotherapy care takes these differences into account.

Quality physiotherapy services: structure, process and outcome

Physiotherapy services can be described in terms of structure, process and outcome. Donabedian (1990) wrote about the importance of each of these elements
in evaluating and improving the quality of health care, and thus it seems important that physiotherapists consider their service from each of these perspectives, in order to comprehensively address the needs and expectations of their stakeholders.

Quality structures refer to the environment in which physiotherapy services are provided, for instance appropriate and safe facilities, minimum waiting times, relevant staff training, appropriate staff-patient ratios, timely communication, adequate and flexible appointment times and patient privacy. Quality processes reflect aspects of care and include recognition of the important elements of the presenting condition, development of empathic relationships with patients and other stakeholders, and informed decision making about management. Quality outcomes include the use of reliable and valid measures that reflect stakeholder needs, and methods of monitoring costs and benefits by benchmarks or performance indicators (Ovretveit 1994).

Measurement of health service quality from the perspective of structure, process and outcome continues to evolve. Quality structures are currently evaluated by accreditation procedures. However, ways in which quality physiotherapy processes and outcomes are evaluated are not as well defined. In order to develop appropriate evaluation criteria for physiotherapy process and outcome, a number of elements invite consideration.

Diagnosis (classification) Accurate diagnosis is an integral element of primary contact physiotherapy practice. Diagnosis links legal and moral implications of primary care with the decision-making processes underpinning the physiotherapy “product”. It attempts to make sense of a range of observed and reported features such as signs, symptoms, time frames, potential causal mechanisms and departures from expected normality based on prior knowledge. In the clinical setting, diagnosis appears to be arrived at by stepped and algorithmic processes of grouping presenting features into recognisable clinical patterns (Jones 1998). However, currently, there is no standard agreement on classification or recording of clinical patterns. A recent study in South Australia recorded characteristics of physiotherapy diagnosis (Grimmer and Bowman 1997). It described a range of features, including injury disease mechanisms, body location and structures, chronicity, signs, symptoms and expectations. It highlighted the importance to clinicians of a range of diagnostic descriptors, and also the difficulties of combining these descriptors into one category, such as numeric code. Attempting to deal with the issues of allied health classification, the National Allied Health Casemix Committee (1999) is proposing a set of classifications based on indications for intervention, which offer physiotherapists an alternative approach to standardising classification of conditions. Currently, these classifications are undergoing validity testing, but have not been tested in the sense of supporting best practice management or outcome measurements.

External constraints in the classification of physiotherapy diagnoses also need consideration. For example, there is little to support the comparability of physiotherapy diagnosis of spinal dysfunction with objective diagnostic measures such as radiographs (Fritz 1998). Evidence of agreement between practitioners when categorising the same set of presenting symptoms, signs, causal mechanisms and departures from expected normality (Wilson et al 1999) is inconclusive. Furthermore, it is not clear how a diagnosis directs decision-making about appropriate physiotherapy management strategies.

Evidence-based management strategies The quest for evidence-based health care arose from general recognition in the Western world of the variability of the quality of processes and outcomes of health care. The concept grew from the writings of Donabedian (1990) that health care should do more good than harm, and from the philosophy of Cochrane (1972) that only effective health care should be funded. Current accepted physiotherapy management provides opportunities to select from a range of options, few of which have been demonstrated as being more efficacious than any other. The focus on evidence-based physiotherapy management suggests that greater sophistication may be required regarding the most appropriate research designs for research questions. For instance, the usefulness of the hierarchical medical model related to physiotherapy evidence is not clear, and there may well be instances where high level physiotherapy evidence cannot be produced because of constraints on subject selection, sampling, treatment or measurement blinding (Gladman 1991).

Measurement of outcome An estimate of the outcome of care requires comparison of two sets of
measurements – the first one usually taken when physiotherapy management commences, and the other at a later stage (Ruta et al 1994). The difference between the two sets of measurements demonstrates change that may be attributed to physiotherapy intervention. Thorough measurement of physiotherapy outcome requires knowledge of the natural resolution of the condition, as well as the effects of other forms of management which may be delivered in tandem with physiotherapy, such as medication or other therapies (Partridge 1996).

Traditionally, physiotherapists have measured the outcome of their intervention in terms of changes in observable signs and symptoms (Cole et al 1994). However, these measures of outcome frequently prove to be inadequate when discussing health management with other stakeholders, because health provider measures alone rarely reflect the needs and expectations of all other stakeholders (Grimmer et al 1999, Sheppard 1993). “Whose outcome?” is the key question. If outcome measurement does not adequately address needs and expectations of all stakeholders, or if the costs of providing care outweigh the gains, then individual stakeholders may well perceive physiotherapy management as being of poor quality.

Differences in the way outcome is measured may explain stakeholder dissatisfaction with physiotherapy. Patients often report signs and symptoms in terms with which they identify, such as functional impact on their life (Grimmer et al 1999, Sheppard 1993). Physiotherapists, however, often place more emphasis on management and evaluation of observable signs and symptoms, than on functional issues (Partridge 1996). If patients measure outcome by change in functional capacity (for instance hip function), while physiotherapists measure outcome by change in signs and symptoms (for instance hip range of movement), then there is an opportunity for mismatch between stakeholder expectations of outcome. This mismatch becomes more potent if the funding body is assessing the cost of physiotherapy management against its own measure of outcome, such as return to work or claim closure. Thus, where stakeholder expectations and measures of outcome are not clearly articulated and shared, and are not consistently re-evaluated by all stakeholders, the potential for dissatisfaction is all too evident.

A high degree of variability has been reported in physiotherapy outcome measurement, spanning choice of measure, recording, storage, analysis and interpretation (Grimmer and Bowman 1997, Jackson et al 1996). Despite efforts by organisations such as the National Coding Centre, the National Allied Health Casemix Committee, third party insurers such as the Department of Veterans’ Affairs and WorkCover, and the Australian Physiotherapy Association, there currently is no “best practice” in outcome measurement. Until the profession takes ownership of this, decisions on what constitutes best practice packages of care may not be well informed.

Clinical risk management

Clinical risk management is an essential element of consistently providing quality care and assuring quality outcomes. It entails early recognition of patients who may fail to respond to best practice management, and/or who may suffer adverse effects from treatment (Ovretveit 1994). Recognition of risks should form part of assessment and lead to specific contracts between patient, therapist and funding body. Recognition of risks may also indicate to the therapist that a particular treatment approach should be avoided. Questions that could direct risk management strategies include:

- Why do particular patients fail to respond to treatment?
- Is there a potential risk of sustaining an adverse event as a result of a particular form of physiotherapy management?
- What measurement tools will detect risk characteristics?
- Can patients be directed to appropriate alternative methods of management?
- What components of risk are addressed within the diagnosis?
- Are physiotherapists’ skills adequate to detect and/or manage risks?
- Can management strategies be tailored to address patients at risk?

Appealing features of quality physiotherapy packages are systems that incorporate clinical risk indicators and predictive measures of outcome. Packages of care which recognise the impact of significant risk
factors on poor outcome should take some of the
guesswork and frustration out of the delivery of
quality care for clinicians, and provide patients and
funders with an indication of likely cost indicators of
successful treatment.

Interaction effects

Most physiotherapy care involves interaction between
people, although little is known on the effects of these
interactions on treatment outcomes. It seems
imperative that the effects of interaction are better
understood prior to the development of experimental
models to test the efficacy of particular management
strategies (Wilson et al 1999). Unrecognised or
uncontrolled interactions may well confound
experimental outcomes, thus failing to provide much-
needed evidence of particular treatment effects
(Partridge 1996). Interactions which are well
recognised, but not well understood include
physiotherapist and patient personalities, stakeholder
needs and expectations, the effect of sequential
treatment sessions on patient outcome, the
application of different best practice management
options (in series or in tandem) within the one
treatment session, the effect of time on re-evaluation
of needs and expectations, fiscal concerns for both
patient and therapist and the chronicity of the
condition on tissue response to treatment.

Episodes of care

The effect on recovery rates of multiple applications
of physiotherapy care has not been well addressed.
One occasion (session) of physiotherapy care may
have a significant impact on outcome. Based on this
success, the patient, physiotherapist and/or funder
may consider that additional sessions of similar care
will have similar benefits. The law of diminishing
returns (Fuchs 1986, McClelland 1991) suggests that
this may not always occur, and further research is
required to understand the effects on outcome of a
series of treatments. The best method of managing
chronic patients (ie managing symptoms on a regular
basis rather than addressing them with a burst of
concerted treatment) has also not been tested, nor has
the long term outcome for the patient who is content
to seek once-only advice for self management of a
recurring problem.

Towards an understanding of the
physiotherapy package

The provision of quality packages of physiotherapy
care would appear to be an essential requirement if
there is to be a place for physiotherapists in the health
market in the next decade. Consistently high quality
physiotherapy care can occur only when there is
general commitment to understanding all the
constructs of the physiotherapy package. Commitment to achieving this understanding is
required from all physiotherapists. Clinicians,
educators and researchers must work collaboratively
to ensure that the profession has an evidenced-based
platform on which its survival may well depend. Thus
it seems imperative that physiotherapy services are
underpinned with evidence-based practice that is
acceptable to, and reflects the needs of, all
stakeholders.

Authors Karen Grimmer, Centre for Allied Health
Research, University of South Australia, North
Terrace, Adelaide, South Australia 5000. E-mail:
karen.grimmer@unisa.edu.au (for correspondence).
Matthew Beard, Physiotherapy Department, Royal
Adelaide Hospital, North Terrace, Adelaide, South
Australia 5000. Alison Bell, Centre for Allied Health
Research, University of South Australia, North
Terrace, Adelaide, South Australia 5000. Lucy
Chipchase, Centre for Allied Health Research,
University of South Australia, North Terrace,
Adelaide, South Australia 5000. Elizabeth Edwards,
Flinders Medical Centre, Bedford Drive, Bedford
Park, South Australia 5042. Ian Fulton, Centre for
Allied Health Research, University of South
Australia, North Terrace, Adelaide, South Australia
5000. Tiffany Gill, Centre for Allied Health Research,
University of South Australia, North Terrace,
Adelaide, South Australia 5000.

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