

# Quality in primary health care: a multidimensional approach to complexity

Good care is much more than meeting disease specific targets. **Iona Heath and colleagues** argue that assessments of quality must take into account all the complexities of primary health care

In his 1913 novel *Chance*, Joseph Conrad wrote about the changing fashion for certain words: “You know the power of words. We pass through periods dominated by this or that word—it may be development, or it may be competition, or education, or purity or efficiency or even sanctity. It is the word of the time.” Today’s word is quality.

In order to assess the quality of primary health care, we have to define what quality means in this context. But who should make the definition, and whose perspective should take priority? The easy assumption is that quality should be defined by patients rather than by policymakers, politicians, or healthcare professionals—but who is the representative patient? How generalisable can any measure of the quality of primary health care be across different economic, social, and cultural contexts?

## What makes good care?

The process and structure of primary care are highly dependent on the nature of each society and its healthcare system.<sup>1</sup> Thus, the traditional Donabedian approach to assessing quality based on structure, process, and outcome<sup>2</sup> is relevant to primary care but must take into account the diversity that results from primary care’s adaptability. Efforts to improve quality by reducing undesirable variability in the delivery of services must also avoid reducing desirable variability that reflects personalising, integrating, and prioritising care.

Effective primary care depends on the integration of both vertical and horizontal care. Vertically oriented care concerns the management of specific diseases from primary to tertiary care, whereas horizontally oriented care emphasises the integration of care around the needs of individuals and the design of systems of care that focus on the broad needs of the community and population. Thus measures of primary care quality must reflect both dimensions. An emphasis on vertical disease oriented

care may improve disease specific outcomes but can also have unintended consequences in fragmentation of care and higher costs for reduced value.<sup>3</sup>

Quality of care is particularly challenging in the fragmented and pluralistic systems often seen in low and middle income countries and in some high income countries, most notably the United States. Most of the elements deemed responsible for the failure of primary care programmes in these countries are more

related to structure than process. Such elements include limited, erratic, or unsustainable funding; inadequate training and equipment; and primitive rather than primary health care, which occurs when primary care is conceptualised as providing basic services only for poor people rather than as the foundation of care for all people.

Most patients presenting in primary care have multiple, interacting, and compounding problems—physical, psychological, and

## CLINICAL DOMAIN INDICATOR GROUPS:



Vertical outcomes of primary care are relatively easy to measure (as in the British quality and outcomes framework, shown here), but the horizontal functions—integrating, prioritising, and personalising care—are much harder to assess

social.<sup>4,5</sup> However, most scientific evidence on which disease specific quality measures are based, explicitly excludes people with comorbidity.<sup>6</sup> When such patients are seen by several specialists, each of which has expertise in a single condition, the sum of the advice can be both conflicting and excessively burdensome to the patient. The key task of primary health care is to integrate care so that it becomes both possible and coherent, personalising care to the circumstances and capacities of the individual patient and prioritising the various problems so that the burden on the patient is minimised.

Assessing quality in primary health care is made even more complex because it is grounded in interdisciplinary teamwork, with each team member and the interaction between them contributing to, or perhaps undermining, the quality of the care that is delivered. This teamwork occurs within the practice but also with multiple specialties, disciplines, agencies, and groups outside the practice. Thus, the quality of interactions with other medical disciplines and community organisations is an important aspect of primary care's success.<sup>7</sup>

### Measuring quality

The vertical outcomes of primary care can be at least partially assessed at the level of the care of individual diseases and are relatively easy to measure. However, the outcomes of the horizontal functions—integrating, prioritising, and personalising care—are much more difficult to assess and require a broader perspective.

Recently, financial incentives have been attached to measures of vertical quality in the form of payment for performance. The largest and most ambitious of such schemes in primary health care is England's quality and outcomes framework.<sup>8</sup> In the latest version there are 700 quality points to be collected with checklists for numerous conditions. We do not yet know whether the framework will improve the health of the English population,<sup>9</sup> but it seems likely that the management of some patients with conditions such as diabetes and heart failure will be improved. However, considerable and as yet unquantified perverse effects are also probable. These include the overtreatment of monitored conditions and reduced attention to unmonitored issues important to the patient.

With so much of the agenda of each con-

sultation now dictated from outside, there is a risk that the real concerns of patients will be marginalised or ignored.<sup>10</sup> A huge number of questionnaires, interview schedules, and rating scales have been developed over recent years to create patient reported outcome measures (PROMs),<sup>11</sup> which attempt to assess the direct experience of individual patients. However, many of these follow a vertical rather than a horizontal pattern. One of the few attempts to assess the whole effect of a primary care consultation was devised by John Howie and colleagues. They set out to measure "enablement" as a marker of quality of care, suggesting that it is possible for general practitioner care to empower patients so that they feel they have been helped to cope and to understand.<sup>12</sup> This measure is rooted in the craft knowledge of general practice and reflects high standards which are difficult both to uphold consistently and to measure.

### Rise of bureaucracy

Quality measures are used increasingly as part of the bureaucratic control of professional activity. Although this may eliminate the worst practice, it leaves little room and no incentives for the exploration of excellence. Attention confined to the parts may damage the whole. For example, focusing on the treatment of blood pressure may improve this indicator but does not necessarily reduce patients' global cardiovascular risk.<sup>13</sup>

Bringing useful perspectives from organisational sociology, Ouchi has suggested that when the product is uncertain (as it is in primary care because it depends on the needs of a particular individual) and the technology for achieving the product is also uncertain (when there is no single agreed approach for every clinician to meet each patient's needs), then both markets and bureaucracies will tend to perform poorly in producing high quality care.<sup>14</sup> This is because markets require the product to be clearly defined and bureaucracies require that the process be well defined so that it can be monitored. In this context, it is easy to understand why medicine has had more of what Ouchi describes as a clan tradition with internal norms and professional socialisation playing a major role in the definition of quality. Howie's enablement index seems to reflect this tradition.

Recent successful attempts to define some aspects of quality more explicitly have allowed

the emergence of more bureaucratic control. This is not a bad thing in itself, but aspects of care that can be turned into externally monitored quality indicators barely scratch the surface of what doctors do and provide a relatively inflexible solution that can address only a small part of the quality problem.

The implication of Ouchi's analysis is that the challenge for those seeking to improve the quality of primary health care is to make explicit those attributes of clinical practice that are part of the professional tradition and the spirit of primary health care. Professionals need to remain aware of their values and behaviours and of how they socialise their trainees.

### What is missing?

The assessment of quality within health care, and perhaps particularly primary health care, remains both difficult and controversial. There are as yet no tools capable of assessing the quality of primary care delivered to those who have multiple and compounding conditions. Such tools will be dependent on a much richer understanding of the complex interactions between different conditions, diagnoses, and contexts and of the challenges of prioritising, integrating, and personalising care for a succession of different individuals, families, and communities.<sup>15</sup>

Quality of care needs to be assessed and calibrated at many different levels: the level of the implementation of evidence based guidelines; the level of the needs, values, and priorities of the individual patients; the level of the family and the community involved in the care and support of that patient; various population levels; and finally the level of the whole healthcare system, where affordability and equity become the over-riding criteria.<sup>16</sup> Too much attention to measures at one level can undermine the achievement of quality at other levels and as a whole.

The quality and outcomes framework purports to measure clinical quality at the level of the individual, or rather at the level of a standardised individual of its own creation, and organisational quality at the level of the primary care practice. Take the case of a single patient with hypertension. However, she also has bronchiectasis after many years of smoking and has just had cancer of the oesophagus diagnosed. She has a child with severe learning difficulties and she is fearful, not only for herself but also about what will happen

to her child. She is married and the relationship is difficult. Her sister has lung cancer and is already very ill. The sister's children have problems and children of their own, and this is only the beginning of a story which becomes richer and richer the more that it is told. It is a story with multiple components, each of which interacts with the others unpredictably. Each of the components has a history that affects the interaction, and each has the capacity to affect the patient's blood pressure and to support or undermine the treatment that is prescribed for her. To what extent does the achievement of a blood pressure of less than 150/90 mm Hg assess the quality of this patient's care?

Could it be that some of the apparently poor adherence to guidelines in primary health care is not a sign of poor quality but rather a sign that the indicators of quality are not yet adequate?<sup>17</sup> There will surely come a point when we need to restrain our contemporary obsession with measurement. There will perhaps always be some essential components of care which verge on the ineffable and whose subtlety and effectiveness could be destroyed by the very attempt to measure them.

### The way forward

Future attempts to measure quality in primary care should take the unique complexity of primary care into account and move away from a linear approach to engage multiple perspectives and multiple levels. Balancing the biotechnical and the biographical is an essential component of good primary care and measures should reflect both these perspectives and will need to draw on expertise from disciplines beyond biomedical science.

The multiple levels should include both the vertical tasks of primary care (the management of specific acute and chronic diseases and the provision of preventive services) and the horizontal functions of personalising, prioritising, and integrating care across multiple illnesses and domains of care. The benefits of such horizontal functions accrue not only to the individual, but also to families, communities, and societies.

Thus, primary care quality cannot be measured only at the level of the individual patient, clinician, or practice but must also be assessed at the level of the system and society. The components of quality in primary care are complexly related. Oversimplified conceptualisations risk relegating quality to "the tyranny of what can be measured,"<sup>18</sup> rather than enhancing the possibilities of what might be achieved.

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## ANSWERS TO ENDGAMES, p 959

For long answers use advanced search at [bmj.com](http://bmj.com) and enter question details

### STATISTICAL QUESTION

#### Matching the test to the problem

- a) Poisson distribution based test
- b) Paired *t* test
- c) Two sample *t* test
- d)  $\chi^2$  test

### PICTURE QUIZ

#### Petechial rash on the extremities

- 1 Additional studies should include a faecal occult blood test, serology for hepatitis B and C, serum protein electrophoresis, anti-streptolysin O titre, and measurement of antinuclear antibodies, antineutrophil cytoplasmic antibodies, rheumatoid factor, serum immunoglobulins, and cryoglobulins. Abdominal ultrasound and renal biopsy may also be indicated.
- 2 The most likely diagnosis is Henoch-Schönlein purpura or anaphylactoid purpura, a leucocytoclastic vasculitis of small vessels.
- 3 Complications of Henoch-Schönlein purpura include nephritis or nephrotic syndrome, acute and chronic renal failure, gastrointestinal bleeding, intussusception, bowel obstruction, and bowel perforation.