Managing for Quality in Health Care: Quality Improvement Issues in Ghana’s Community-based Health Planning and Services Concept

Reuben K. Esena
University of Ghana, School of Public Health, P. O. Box LG 13 Legon-Accra, Ghana

ABSTRACT

Quality Management to improve health services is crucial to Community-based Health Planning and Services (CHPS) targeted at bringing health to the doorstep of the community. The CHPS scales up innovations strategized to improve the accessibility, efficiency and quality of health and family planning. But the CHPS dissemination activities are incorporated into routine management operations. Thus appropriate management activities drive organizational change to scale up innovations in the health systems. Indeed, the process of the CHPS requires Total Quality Management (TQM) of the system because improving access to health care delivery in remote communities is a central goal of health sector reforms. This paper discusses and reviews the Quality Improvement issues of the CHPS concept.

Keywords: CHPS, Community-based, Quality Improvement (QI), Scaling up, Innovation, TQM.

INTRODUCTION

Total Quality Management (TQM) builds on quality assurance by extending the practice of meeting precise specifications and following set procedures for all aspects of the work related to the CHPS, in such a way that all workers know what they have to do and how they should do it. The standards, on which it is based, although specific, are not fixed. An important part of quality development is the need continually to be improving what is offered based on what the customers (patients) expect. Attempting to satisfy the needs of the community in annual meetings at the workplace (CHPS centres) may be the beginning of managing for Quality.

Address for correspondence:
Reuben K. Esena
University of Ghana, School of Public Health, P. O. Box LG 13 Legon-Accra, Ghana
E-mail: rkesena@hotmail.com
Total Quality Management has become an important concept in health care management. Derived from industry, it purports to offer a holistic approach to managing and improving health organizations both within and outside health care. Quality is a notion that is easy to advocate and to support, but difficult to identify and define. TQM is not a panacea, but it does offer some useful ideas that have the potential to enhance the quality of health care especially for the CHPS zones; intended to create a more cost effective vehicle for primary care delivery.

**Definitions**

TQM is a set of values on a commitment to achieving quality as defined by the users of the services that health care provides. Customers, in this context, conventionally fall into six groups:

- The primary users, that is, the patients
- The secondary users, are the relations of patients who receive health services indirectly
- The tertiary users, such as employers, who benefit from health services
- The fourth, quaternary level are the “stakeholders”
- The fifth, quinary level is the “community” as a whole
- The internal users, that are individuals or members of other teams who rely on, benefit from, or whose work depends on the services provided by a particular team. These providers are the users or customers of those services.

**Quality Improvement [QI]:**

The attainment or process of attaining, a new level of performance or quality that is superior to the previous level of Quality. Quality Improvement is a formal approach to the analysis of performance and systematic efforts to improve it. Quality Improvement is part of TQM theory, and its history began from Industry and it is oriented to increase effectiveness and efficiency in meeting and surpassing customer expectations, while maintaining minimal compliance with regulations and standards.

**Aims for Quality Improvement:**

**First,** the health care must be safe. This means, “First, do no harm,” which makes it the individual caregiver’s responsibility to try extra hard to be more careful and that safety must be a property of the system. No one should ever be harmed by health care again.

**Second,** health care must be effective. It should match science, with neither underuse nor overuse of the best available techniques.

**Third,** health care should be patient-centred. The individual patient’s culture, social context, and specific needs deserve respect, and patients should
play an active role in making decisions about their own care. That concept is especially vital today, as more people require chronic rather than acute care.

Fourth, care should be timely. Unintended waiting that doesn’t provide information or time to heal is a system defect. Prompt attention benefits both the patient and the caregiver.

Fifth, the health care system should be efficient, constantly seeking to reduce the waste — and hence the cost — of supplies, equipment, space, capital, ideas, time and opportunities.

Sixth, health care should be equitable. Race, ethnicity, gender, religion and income should not prevent anyone from receiving high quality care.

Health is a human right. We need advances in health care delivery to match the advances in medical science so the benefits of that science may reach everyone equally.

**THE CHPS Concept:**

The district is the major unit of primary health care organization and management for service delivery in Ghana, and health services are organized in a three-tiered hierarchy with the District level (level C) at the top; next is the Sub-district level (level B) and the Community level (level A) at the bottom. This clearly shows that CHPS is not operating in isolation but tied to a health centre in the sub-district as shown in Figure 1.

---

**Figure 1:** District Level Health Services Three Tiered Hierarchy

Source: Ghana Health Service, 2005

---
The Ministry of Health (MOH) through the Ghana Health Service (GHS) pioneered the implementation of a national programme, the CHPS, in an attempt to replicate the results of the Navrongo Community Health and Family Planning Project (CHFP). This initiative was piloted in selected districts including Nkwanta, Birim North and Abura-Asebu-Kwamankese. The programme represented a bold effort to involve households and communities in the provision of Community-based ‘close-to-client’ doorstep health delivery.

CHPS is a national programme that bridges the gap in healthcare access. Hence, the Ghana Poverty Reduction Strategy (GPRS) identified the CHPS as a key element in pro-poor health services. This community-based service provision enables the Ghana Health Service (GHS) to reduce health inequalities and promote equity of health outcomes by removing geographical barriers to health care. The strategic policy of the GHS is to have a three tier level of service provision within a district – the District (Hospital) Level, the Sub-District (Health Centre) Level and Community-based level. All Sub-districts are to be divided into zones with a catchment population of 3000 to 4500 where primary health care services are provided to the population by a resident Community Health Officer (CHO) assisted by the community structures and volunteer systems. The deployment of all elements necessary for the CHO to provide house-to-house service makes that zone a fully functional CHPS zone within the sub-district.

A key component of CHPS is a community-based service delivery that focuses on improved partnership with households, community leaders and social groups – addressing the demand side of service provision and recognizing the fact that households are the primary producers of health. A CHO engages each Community within the zone (catchment area) in micro planning of health activities, sometimes termed “community decision making systems.” The CHPS organizational change process relies upon community resources for construction labour, service delivery, and programme oversight including monitoring and evaluation. As such, it is a national mobilization of grass-root action and leadership in health service delivery.

Community-based Health Planning and Services (CHPS) initiative is therefore a key health system reform to deliver community-level service. CHPS has been implemented in Ghana as a national programme since the year 2000. In some districts where CHPS is functioning, CHPS has proven very useful as a model for improving access. However, Quality Improvement issues have not been assessed, hence the need to discuss its management aspect.
Major challenges of CHPS implementation

There is evidence from field work (Binka et al.; 2009) which indicates that although the CHPS programme is considered by policy makers, development partners and public health providers as a good pro-poor health service delivery strategy, particularly in rural areas, its implementation has been thwarted with obstacles and/or problems that have not permitted the full realization of its benefit. The implementation obstacles over the period include:

a) Lack of political will to scale up: At the national level, CHPS is not considered as a key health delivery concept to enhance scale up. At the implementation level (i.e. district and community), there are misunderstanding of the concept of CHPS and lack of district and community participation. Anecdotal evidence suggests that the support for CHPS was reduced when the MOH decided to fund High Impact Rapid Delivery (HIRD) instead of CHPS, because they were unhappy with the progress CHPS was making to rapidly achieve MDG 4 [reduce by two-thirds, between 1990 and 2015, the under-five mortality rate] and MDG 5 [reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio].

b) Inadequate resources: The MOH and GHS have no specific budgets to support the CHPS programme. This has resulted in incoherent partnership and overemphasis on CHPS compounds to the detriment of other components.

c) Different Understanding of CHPS among the Health Sector Leadership: The understanding of CHPS differs among MOH and GHS leadership at all levels. This has led to skewed implementation toward curative services to the detriment of promotive and preventive services. This has also led districts and communities to request for “clinics”.

d) Insufficient CHPS zones: Even where the zones are demarcated, they are not functional because there are no CHPS compounds.

e) Inadequate provision of basic equipment: Most CHPS compounds lack basic clinical and communication equipment.

f) Inadequate means of transports: There are inadequate motorbikes for the CHO for their visits. Maintenance of broken down motorbikes is generally poor and supply of fuel is a problem.

g) Inadequate skill mix of CHOs: CHOs need improved skill mix to improve their functionality, such as midwifery.

h) Limited Community Mobilization Skills for CHOs: Community participation and mobilization component of the CHPS programme is completely absent in the programme leading to more static and curative services.
i) Issues related to new health initiatives: Introduction of new initiatives such as HIRD need to clarify the role of CHPS so that it is not implemented in a way that contradicts CHPS. The linkages and supportive mechanism must also be identified and clarified.

Quality Improvement strategies for CHPS zone

For CHPS to embark on activities focused on quality of care, it is essential to first define the ultimate goal – quality improvement. Traditionally, health care have relied on quality assurance, which involves retrospective measuring of quality in relation to a predetermined threshold. The problem with this approach is the perception that quality assurance is focused on finding violations of standards and punishing those who violate them, rather than proactively ensuring high-quality care. Quality improvement, in contrast, is forward-looking process that allows health care providers [such as in the CHPS zones] to use a collaborative approach to strive for excellence. Quality improvement is based on the idea that problems in quality generally “arise not from negligence or recklessness on the part of the individual workers but from the systems in which these individuals operate”. To be successful, it is critical to create institutional culture that values and supports QI. This requires educating health care providers at the CHPS zone and customers (patients; community; stakeholders) and creating a climate of trust and collaboration – using the following steps (IHI³, 2001):

Step 1: Establish an Aim for Quality Improvement: define a goal (SMART) for the CHPS zone e.g. immunization coverage for children under five at Lakeside District from June to July 2013.

Step 2: Form a Quality Improvement Team: the composition of QI team varies depending on the aim, the system, and processes affected by the improvement. But effective QI teams generally include the following expertise:

A: System leadership by a person who has the authority of institute changes and overcome institutional barriers to change.

B: Technical expertise by a person who can help the team identify what to measure and how to design simple, effective measurement instruments, collect and display data, and interpret data.

C: Day-to-day leadership by a person who ensures that changes are being tested and data are being collected on a regular basis.

Step 3: Establish Measures of Quality Improvement: Data are often easily obtained without relying on complicated information systems. For example, Percentage (%) of curative services rendered for children under five at the CHPS zone; or immunization coverage for children 0-11 months at the CHPS zone.
Step 4: Develop and Test Changes: The model for process improvement in health care is in Figure 2. The model includes three questions that can be asked in any order, plus a “Plan-Do-Study-Act” cycle in which a quality improvement team plans a change (e.g., applying a new treatment protocol at the CHPS zone), tries it out in a real world setting, studies the results, and then uses the knowledge gained to refine the change and plan the next test. In the CHPS centres, if a QI programme adopts a process-of-care measure that links scientific evidence to good outcomes, then extensive testing or modification of changes may not be necessary.

Process improvement comprises a seven-step method:

1. **Define Process**: What are we trying to accomplish?
2. **Measure Process Performance**: how will we know that a change is an improvement?
3. **Analyze Causes of Variation**: What changes can we make that will result in improvement?
4. **Generate & Plan Improvement Ideas**: determine goals and targets; Determine methods of reaching goals
5. **Implement Change (Do)**: Engage in education and testing; implement work
6. **Study Results of Change**: Check the effects of implementation
7. **Act Accordingly**: take appropriate action

![Deming Cycle for Quality Improvement in Health care](Image)

**Figure 2**: Deming Cycle for Quality Improvement in Health care

TQM and its implications on the CHPS Concept

However quality is perceived and however users of health care are defined, customers are at the heart of ‘quality organizations’. West-Burnham cuts through the perennial argument about ‘‘who is the customer (patients), family members, employers or government’’ by saying that they all are, in different circumstances and for different purposes. He notes that quality offers a systematic, holistic and value-driven approach which has the potential to be developed. The most cogent argument for
adopting TQM is the extent to which existing practices are felt to be appropriate and successful in an era of increasing institutional autonomy (West-Burnham 1992, page 7). Thus, quality in health care context of CHPS must be interpreted as actions, which improve the health outcome of patients (clients). As such, procedural systems, while offering a possible basis for quality, may also evade the central need which is to motivate individual staff, particularly Community Health Workers (CHWs), Nurses, Midwives, to improve what they do. The emphasis on people is argued to be more effectively supported by a total quality management approach. Llis [mentioned in Plowright, 2009] argued that:

“Total Quality Management is a philosophy and a methodology that assist institutions to manage change, and to set their own agendas for dealing with the plethora of new external pressures. Considerable claims are made for TQM. In the industrial sphere it is seen as the means by which beleaguered economies can transform themselves to better compete with the fast growth economies” (Sallis 1996, page 3). So, those in health care can properly apply TQM especially to CHPS [in this context] to complete a similar transformation.

Marsh (1992) offers the following definition that he links to the diagramme in Figure 3:

“Total quality’’ is a philosophy with tools and processes for practical implementation driven by all the employees of an organization in order to satisfy and delight customers”:

![Figure 3: Elements of TQM (Marsh, 1992)](image-url)
The four elements in the diagram may be linked to the definitions as follows:

- Continuous Improvement - Values, leadership and strategy
- All the employees - People
- Tools and processes - Quality assurance
- To satisfy and delight - Customers

West-Burnham\(^8\) (1994, page 172) argues that TQM has much to offer in training because it is:

- Value-driven; it has a clear moral imperative.
- Customer-focused; e.g. existing for, and driven by the needs trainees, patients, stakeholders and community.
- Based on prevention; concerned with optimizing outcomes.

West-Burnham\(^4\) (1992, page 15) draws on Dale and Plunkett’s\(^9\) (1991) work to distinguish between TQM and three similar concepts; quality assurance, quality control and inspection. They suggest that these terms form a ‘hierarchy’ (Figure 4):

<table>
<thead>
<tr>
<th>Total Quality Management</th>
<th>Involves suppliers and customers aiming for continuous improvement concerns, products and processes. Responsibility with all workers; delivered through teamwork</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality Assurance</td>
<td>Use of statistical process control; emphasis on prevention; external accreditation delegated involvement; audit of quality systems; cause and effect analysis</td>
</tr>
<tr>
<td>Quality Control</td>
<td>Concerned with product testing; responsibility with supervisors; limited quality criteria; some self-inspection; paper-based systems</td>
</tr>
<tr>
<td>Inspection</td>
<td>Post production review; re-working; rejection control of work force; limited to physical product</td>
</tr>
</tbody>
</table>

**Figure 4:** TQM compared with three concepts: quality assurance, quality control and inspection.
West-Burnham\(^4\) (1992, page 16) claims that progression through this perceived hierarchy leads to four significant cultural changes:

- There is increasing awareness and involvement of clients (patients) and suppliers (providers).
- Personal responsibility of the work force increases.
- There is increasing emphasis on process as well as product (or services).
- The imperative is towards continuous improvement

The empirical evidence to support these perceived changes is limited but, anecdotally, some of these elements may be observable in certain institutions and health facilities.

**Key Features**

West-Burnham\(^4\) (1992, page 26) identifies eight key features of TQM based on his review of the literature:

1. Quality is defined by the customer, not the supplier.
2. Quality consists of meeting stated needs, requirements and standards.
3. Quality is achieved through continuous improvement, by prevention, not detection.
4. Quality is driven by senior management but is an equal responsibility of all those involved in any process.
5. Quality is measured by statistical methods; the ‘cost of quality’ is the cost of non-conformance. Communicate with facts.
6. Quality has to pervade human relationships in the workplace; teams are the most powerful agents for managing quality.
7. Quality can only be achieved by a valued workforce; education, training and personal growth are essential to this.
8. Quality has to be the criterion for reviewing every decision, every action and every process.

West-Burnham et al.\(^10\) (1995) produce a list of key features that overlap with, but are not identical with, the 1992 list. The reasons for the change in emphasis are not clear. The 1995 list is:

1. Quality is defined in terms of customer’s needs rather than those of the supplier (or providers).
2. Quality management is based on continuous improvement and an emphasis on prevention rather than detection.
3. Quality can be measured.
4. Quality requires visionary leadership but this does not diminish individual responsibility.

5. Quality has to pervade relationships in the work place e.g. structures and team-based management.

6. Quality management is driven by vision and values.

7. Quality assurance involves high levels of consistency.

8. Quality management requires constant review.

West-Burnham\(^\text{10}\) (1995) adopts a different approach elsewhere by linking the main “characteristics” of TQM to the Marsh framework (Figure 3):

**Values, leadership and strategy:**

- An explicit set of values which guide policy making;
- A shared, accepted and understood vision of the future;
- Leadership which is concerned with the implementation of values and vision, emphasizes the importance of personal relationships, empowers through delegation and development and develops creative solutions to practical problems;
- A systematic approach to planning in the long and medium term and an emphasis on action in the short term.

**People**

- A profound belief in the infinite capacity of every individual to develop;
- An emphasis on team-work;
- High investment in training and development;
- An emphasis on personal relationships and sophisticated communication.

**Quality assurance**

- An emphasis on prevention rather than inspection as a means of assuring quality;
- A definition of quality standards;
- A measurement of processes;
- The use of analytical tools to understand problems.

**Customers**

- Customer needs define quality;
- The organization is structured to meet customer needs;
- Effectiveness is defined in terms of customer satisfaction;
- Customers are internal and external.

**TQM and Customers**

The focus on customers is one of the central tenets of TQM, and reflects one of the main themes of Ghana’s policy on health sector reforms.
TQM is a vehicle for increasing responsiveness to customer requirements in health care. Arguably, there is a greater commitment within health to the needs of the consumer but there is uncertainty and disagreement about consumer identity and about how consumer needs should be defined. Juran (1989, page 17) adopts a broad definition:

“A customer is anyone who receives or is affected by the product or process. Customers may be external or internal.”

West-Burnham (1995) identifies four principles of customer focus (in education and training) within TQM theory that is applicable to health care, particularly the CHPS:

1. Quality is defined by the customer not the provider; e.g. health care should be ‘fit for purpose’.

2. Health facilities [CHPS] should be ‘close to the customer’ in that they meet their [community] needs; e.g. patient consultation arrangements should match the availability of patients rather than the convenience of providers.

3. Quality providers ‘know their customers’ and take the trouble to find out their needs and preferences; e.g. customer surveys on aspects of health care.

4. Customer satisfaction may be determined by ‘moments of truth’, striking examples of good and poor quality. Quality consists in the experiences of the customer rather than the aspirations of the provider.

Capper and Jamison (1993) adopt a critical perspective on TQM and, particularly, on its customer focus. They argue that TQM theorists give too little attention to differences between customers and in their ability to influence the nature of services:

“TQM advocates blithely assume, without question, that all ‘customers’ have equal access to resources and services, and ignore power differences that would enable and constrain customer decisions. For example, it is usually customers with the most power who receive the goods and services and who, in turn, will define ‘quality’, whether that power is based on combinations of income, race, gender, ability, religion, sexual orientation, or other personal characteristics… TQM’s naïve belief that the customer’s voice will be heard ignores the forces that elevate some customer voices and silence others” (Capper and Jamison 1993, page 28).

This powerful critique rings true in health care. It is often the rich clients who benefit most from the extra choice arising from full coverage of insurance and health outcomes. However, this caution does not mean that providers are likely to be better at defining need of customers. Rather, health care managers should invest time and effort in
establishing the requirements of all customers, not just those who are most vocal or persistent.

**Quality Assurance**

It is noted that quality assurance (QA) is one of the central building blocks of TQM and forms part of the Dale and Plunkett\(^9\) (1991) ‘hierarchy of quality management.’ West-Burnham\(^10\) (1995, page 25) defines QA as ‘‘the process by which a specified standard is consistently met’’. West-Burnham\(^8\) (1994, page 168) sets out the fundamental elements of QA and gives particular attention to the concept of prevention: ‘‘the fundamentals of quality assurance are meeting specifications through a system designed to ensure prevention. Assurance rejects the notion that mistakes are inevitable’’.

While quality control shows that a product or service is faulty, QA is intended to prevent failure:

‘‘Quality assurance is a management system designed to control activities at all stages… to prevent quality problems and ensure only conforming products reach the customer. The key features of an effective quality assurance system are:

I. An effective quality management system;

II. Periodic audit of the operation of the system;

III. Periodic review of the system to ensure it meets changing requirements,’’

(Munro-Faure and Munro-Faure\(^13\) (1992) page 6-7)

West-Burnham (1995) argues that QA is more effective than inspection model because the latter emphasizes the post-hoc correction of mistakes rather than their prevention. The potential weakness of this position is the questionable notion that ‘‘prevention’’ can be achieved in other contexts, with all their human variables, as in industry, where many inputs can be standardized.

**CONCLUSION**

**The merits and limitations of TQM**

If CHPS centres are to survive, they have to demonstrate that they provide good quality health care. Rural health networks and other collaborations are relevant.

Additionally, CHPS centres have assets for quality improvement initiatives including their small size, relatively uncomplicated administrative structure, closeness to the community, the availability of information and communication technology, and access to sources of technical assistance and support at a zone B or zone C.

Unless CHPS zones create an organizational culture that supports quality improvement efforts through rural health networks, change may never come. Ultimately, it is critical that rural CHPS zones take steps toward developing and supporting continuous quality improvement programmes.
Total Quality Management [TQM] has rapidly become part of the language of health care management and its foci on quality improvement and customer orientation are valid and relevant to CHPS concept. TQM offers a holistic approach which has the potential to enhance positive health outcomes. However, it challenges three existing norms:

- It challenges the control and dependency models implicit in inspection models.
- It replaces notions of health professional autonomy with common purpose and teamwork.
- It replaces “health care knowledge as provider control” with “service as customer control”.

A more fundamental criticism relates to the unproblematic nature of the focus on customers. Capper and Jamison’s\(^\text{12}\) (1993) critique exposes serious weaknesses in this basic dimension of TQM, suggesting power for certain customers and disenfranchisement for others.

The debate about the salience of TQM for health care is polarized as this concluding quote demonstrates:

“Quality cannot be imposed from outside - from outside the organization, outside the team, outside the individual. You cannot inspect in quality. You can’t have externally-driven efficiency and accountability (Bowring-Carr and West-Burnham\(^\text{14}\) 1994, page 75).”

REFERENCES:


