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## 11 – Quality Circles

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### **The Phenomenon**

Ongoing quality improvement (QI) is fundamental to modern family medicine; it is about providing person-centred, safe and effective care, and efficient use of current resources in a fast-changing environment. There are diverse methods, tools and approaches to QI and structured small group work has been shown to contribute to an individual's increase and use of knowledge. The terms peer review group (PRG), quality circle (QC), CME/CPD (continuous medical education/continuous professional development) group, practice-based small group work (PSGW) and small group work (SGW) are used interchangeably in different European countries.

QCs are groups of 6 to 12 professionals usually working in general practice, who meet regularly to consider their standard practice. QCs select the issues they want to deal with and decide on their data-gathering method and on ways of finding solutions to their problems. Practitioner-participation, certain topics and thematic frameworks may be mandatory for accreditations or for reimbursement by health insurance companies. The groups provide a social context for reflective practice and allow the dissemination of knowledge to the work practices of the participants (1).

QCs consist of more than one educational step and are best described as a multifaceted intervention which uses various predisposing, enabling and reinforcing methods (2). They use educational material which is discussed in a workshop-like atmosphere, contact with local knowledge experts, audit and feedback with or without outreach visits, facilitation and local consensus processes. The groups are led through the circle of quality by facilitators who seek to keep the members focused on the issue without controlling them, respecting the contribution of each individual and taking into consideration the group dynamics. Rhetoric and didactic techniques such as debate, consensus discussion, brainstorming, reflective thinking, self-observation and role play, among other practice, appear to keep QCs active.

### **Origins of the Approach**

QCs are based on two concepts: the framework of Knowledge-To-Action-Cycle (KTA) and the social context the group provides for its function. In 1924, Walter Shewart created the first table depicting a circle for continuous control of the process and QI. The US statistician Deming enhanced this and introduced the Plan Do Check Act (PDCA) cycle as a method of QI. QI spread from manufacturing to service industries and then to medical service providers. Donabedian introduced the basic aspects of quality and QI in health care using the same terms as the manufacturing industry. This concept was first implemented in in-patient settings and secondary-care clinics in the Netherlands, where Problem Based Learning (PBL) first influenced the health care

sector. In 1979, PBL was implemented experimentally in Nijmegen, in the Netherlands, where small groups of family physicians met voluntarily on a regular basis, using their peers to continuously and autonomously improve their knowledge.

Gradually, the learning cycle transformed into a cycle of QI as the focus changed from knowledge gain to QI and implementation of knowledge according to the KTA framework (Fig 1)(3).

PBL added didactic techniques and industrial QCs added communication skills and knowledge about group dynamics to these small primary health care groups. QCs spread rapidly to many European countries. A parallel development could be observed at Mc Master University in Canada in the Eighties.

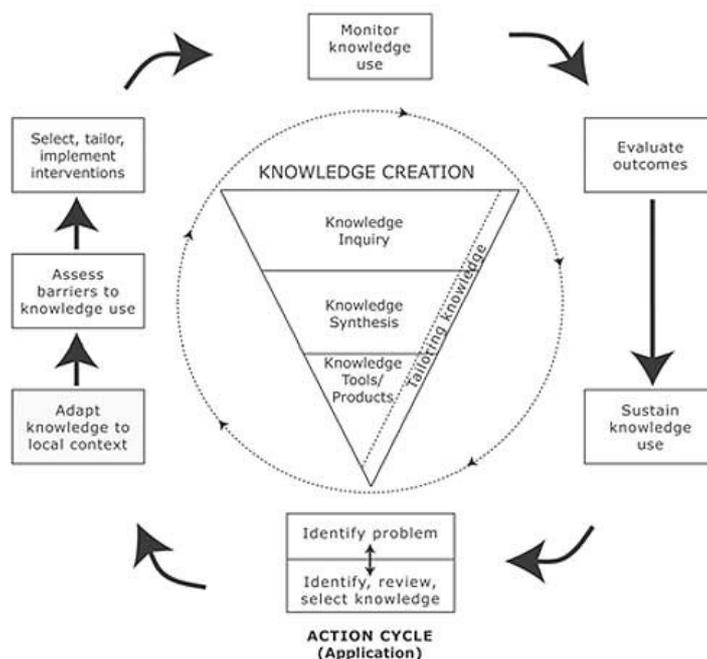


Fig 1: KTA Framework

## Significance of the Phenomenon and its Development

According to a survey performed by the European Society of Quality and Safety in Family Medicine (EQUIP) presented at the WONCA Conference in 2000, of the 26 European countries which participated, QCs had been established in Austria, Belgium, Denmark, Germany, Ireland, the Netherlands, Norway, Sweden, Switzerland and the UK. The main objectives of QCs in primary health care being QI, CPD and CME (4).

Numerous Dutch, German and Scandinavian studies conducted in the following years suggest that QCs improve both individual and group performance in terms of costs, ordering of tests, prescription habits and adherence to clinical practice guidelines, thus resulting in better patient outcomes, measured in changes in performance indicators (5). As the QC programme uses several, though varying sequential interventions, it is tempting to judge the programmes according to the results each component generates. Several systematic reviews (SR) of high quality show that elements of QCs have a positive impact on behaviour (6, 7).

In the Netherlands and Ireland, QCs have become inherent in QI where family physicians are supported by their colleges. In Germany, they are often mandatory as part of integrated or selective contracts in health care. Overall, approximately 50% of all family physicians participate regularly in QCs. In Switzerland, currently, 80% of all primary health care physicians who answered surveys, regularly attend QCs. QCs have developed rapidly in Scotland and England and over 25% of all family physicians in Scotland regularly meet in groups. There are no current data for other European countries about how common QCs are and what features they have. However, literature reviews and contact with European key stakeholders suggest that QCs also play an important role in Austria, Belgium, Denmark, France and Sweden.

## Future Prospects

QCs are assumed to work because they bring people together to identify key issues concerning the quality of health care and they involve people in exploring solutions where there is a need for improvement. However, understanding of the QC components that act independently and interdependently to optimize the programme has to be improved. The influence of the context should be taken into account and studied since it affects both participants and their motivation. Basically, it is about unpacking the black box to see what variations of QCs work for whom and under what contextual features, by looking at the numerous projects that are being undertaken (8). An EQUIP meeting on this subject is planned in Spring 2015 and an updated survey on QCs in European countries will be conducted to discover how common they are, what contextual features they display and to identify optimal conditions for their success.

## Take Home Messages

- Quality Circles are commonly used in primary health care in Europe to consider and improve standard practice over time.
- They represent a complex social intervention that occurs within the fast-changing system of primary health care.
- Quality Circles work according to the Knowledge-To-Action Framework
- Numerous controlled trials, reviews and studies have shown small but positive effects on behaviour change.

## Original Abstract

<http://www.woncaeurope.org/content/20-s-quality-circles>

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