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# Lens of profound knowledge



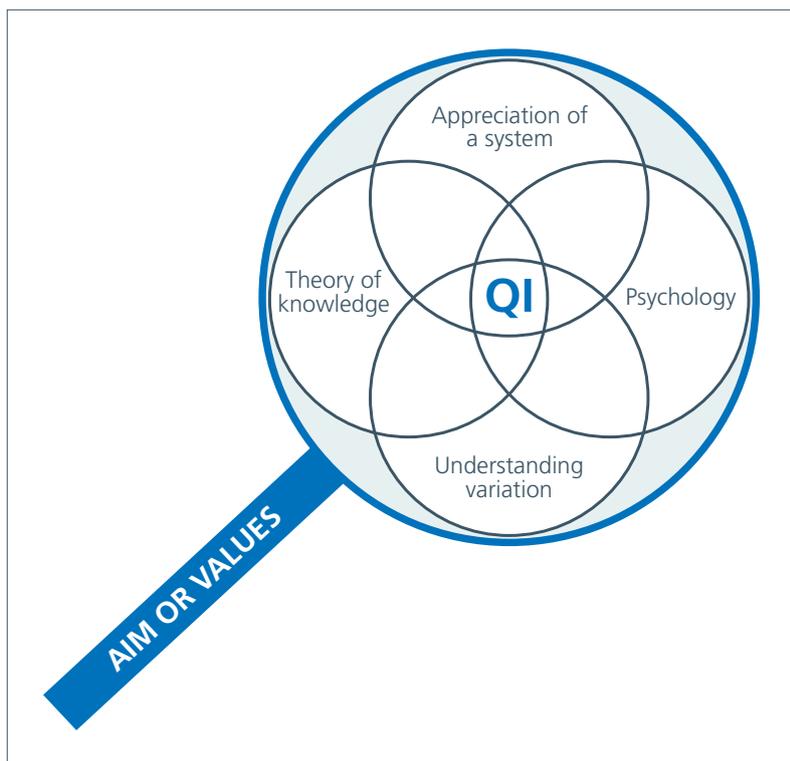
# Lens of profound knowledge

## What is it?

When W Edwards Deming (1993) was describing the skills and knowledge required in service improvement, he introduced the 'system of profound knowledge'. This system consists of four areas that form 'lenses' with which to view any service improvement activity. They are typically described as:

- appreciating a system
- understanding variation
- psychology
- the theory of knowledge.

**Figure 1: Deming's concept of the Lens of Profound Knowledge**



Conceptually based on Deming's ideas, a 'lens' activity has been created that supports structured discussions about what is important in a system undergoing change. In effect, it takes each of Deming's lenses and uses them to view a system in different ways.

When undertaken as a group activity, the 'lens' provides a rapid way of capturing a wide range of perspectives, giving a broad and balanced view of a system. Because it focuses on four areas, it ensures that for any change people consider things such as the:

- full range of organisations, departments and people that are important
- variation in the system (eg differences for sub-groups of patients or variations in outcomes over time)
- mindsets or beliefs of the people who work in the system or who receive services from it
- gaps in understanding for those leading the change and the need to gather data or undertake experiments to discover more.

## When to use it

As a group activity the lens works best when it involves a wide range of people who have some expertise or understanding of a particular system. For example, if the goal is to reduce teenage pregnancy rates then the group might involve GPs, community nurses, teachers, teenagers and others from different parts of the system.

The lens is a mechanism for getting all of the people involved to offer their unique perspective on the system. For example, when considering psychology a GP might mention the mindsets observed in colleagues relating to their attitudes towards advising teenagers about contraception. A teenager might similarly mention the peer pressures that exist around becoming pregnant.

It is important to note that using the lens is about capturing perspectives rather than debating what is right or wrong. Each perspective is valid even if it differs from how others see the system. The lens captures this and therefore supports later discussions about how differing views have come about.

## How to use it

To run a lens activity you will need:

- A group of people who have some understanding of the system or change area
- A facilitator to run the activity, posing questions to the group and ensuring contributions from everyone
- A note taker to capture viewpoints
- Four pieces of flipchart labelled with the four lens areas (system, psychology, variation and knowledge).

The facilitator starts the session by introducing the change or challenge to be addressed (eg "We are here to decide what we need to consider when trying to reduce teenage pregnancy rates").

The facilitator then needs to quickly describe what the four lens areas are meant to cover. Opposite are a series of detailed questions for each area starting with a couple of 'seed' questions. To describe the four areas, a facilitator can introduce the seed question and potentially describe a few of the other questions in each section.

The facilitator then needs to describe the process for using the lens.

The process is straightforward.

1. Usually starting with the 'system' area (since it is the easiest to begin discussions), the facilitator asks the seed questions. As participants start identifying bits of the system, the note taker captures these on the 'system' flipchart.
2. If the conversation drifts into other lens areas, the facilitator moves the group's attention to that area. For example, if someone comments that 'sexual health services are part of the system but they don't see teenage pregnancy advice as part of their role' this might be a good time to hop to the 'psychology' area and note this mindset down. The facilitator can then return to 'system' or continue on with 'psychology' – perhaps using the seed questions for that area.
3. The facilitator supports the group to explore each of the lens areas either using natural discussion points to shift the focus or determining that an area is under-explored so more time should be spent on it.
4. The detailed questions opposite act as a guide for the facilitator on what they might want to explore with the group in each area – but the goal is to both follow and shape the conversation to ensure everyone has a chance to raise points they believe are important.

Typically a lens session should take about 45 minutes. A good way to end the session is to quickly run through the points listed on the four flipcharts, ensuring the language used adequately captures the point being made.