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Value-based health care and quality improvement (QI) — Can a QI approach deliver value-based health care?



Value-based health care — A newer way of thinking about benefits to patients

The essential premise in value-based health care is that **what a patient values** about healthcare delivery is experiencing the **best outcome** possible for the patient’s condition. However, traditional ways of organizing and paying for healthcare services have tended to **focus on delivering evidence-based care through processes of care delivered** often piecemeal **by fragmented clinical services** that are unlikely to function

seamlessly for a patient. The patient’s care involves a series of services with each service responding to the service’s priorities for care delivery, which may not coincide with patient priorities for care. Costs of caring for a patient are distributed across services, with budgets normally related to departments and services and not to patients with the same condition.

A definition of value-based health care is in the box.¹⁻²

| | |
|--------------------------------|---|
| Value-based health care | A healthcare delivery model in which providers , including hospitals and doctors, are paid based on patient health outcomes . In value-based health care: |
| | <u>Health outcomes that matter to patients</u> |
| | Cost of delivering the outcomes |
| | <ul style="list-style-type: none"> • Value is measured for the care of a patient’s medical condition over the full cycle of care. • Outcomes are the full set of health results for a patient’s condition over the care cycle. • Cost is the total cost of care for a patient’s condition over the care cycle. |

Value-based health care was originally described by Porter,¹ whose concept of value-based health care is very significant in a healthcare system,

such as in the US, in which individual providers or groups of providers were paid for the services they deliver, rather than for the outcomes they

achieve. In this type of payment system, value-based health care has huge financial implications for patients and providers.

In the UK and in other countries in which health care is publicly funded, the concept of value-based health care also applies. The application is more about the efficient use of public funding for healthcare systems and making the most efficient use of the limited financial resources provided. In the UK, Gray promoted 'NHS Right Care'³⁻⁴ which was aimed at addressing variations in care (and cost) and improving the quality of care in NHS organizations by:

- **using data** and intelligence **about variations** in clinical outcomes in different comparable parts of England **to diagnose** the **issues** in the delivery of health care **and identify**

opportunities to reduce necessary variation and improve population outcomes

- **develop solutions to reduce unnecessary variations** identified in processes and outcomes
- **deliver** implementation of actions that produce **improvements** in outcomes for patients, populations and healthcare systems.

What's involved in value-based health care — The implications for healthcare services

For healthcare organizations taking on value-based care, there are substantial implications for the organization, management and financing of services. A summary of the transformations involved in implementing value-based care is in the box.¹

| Transformations involved in implementing value-based health care | |
|---|--|
| From | To |
| <ul style="list-style-type: none"> • Organization of health services (and healthcare professional staff) by specialty and department • Focus on complying with process measures from evidence-based practice • Funding by specialty and department and service • Each healthcare organization providing a full range of clinical services • Healthcare organizations are focused on serving their local communities | <ul style="list-style-type: none"> • Integration of health services (and healthcare professional staff) by patient condition • Focus on achieving outcomes that matter to patients • 'Bundled' payment for patient outcome care cycles • Networks of integrated care delivery systems that focus on patient conditions • Healthcare organizations support integrated networks with wider geographic coverage |

Some examples of improvements in patient outcomes, care and the cost implications of healthcare services are in the box.⁵⁻⁶

| Improvements in patient care and cost implications of health care through value-based health care |
|---|
| <p>Examples of achievements of value-based health care include:</p> <ul style="list-style-type: none"> • 34% reduction in admissions for people with chronic obstructive pulmonary disease • Substantially improved management of non-motor symptoms in people with Parkinson's disease • Identifying the outcomes that matter the most to people receiving palliative care • 30% reduction in catheter-associated urinary tract infections in hospital • 45% reduction in emergency department visits for people with diabetes • 30% reduction in unnecessary inpatient stays • 74% reduction in the rate of reoperation due to complications in breast cancer patients |

Value-based health care and quality improvement — The QI process can deliver value-based care

With the commitment of senior management of a healthcare organization, quality improvement projects (QIPs) can be used to support value-based health care using the QI tools described in the box.

| How QI tools can be used in value-based care | |
|---|--|
| QI tool | Learn and act on — |
| Force-field analysis and/or stakeholder analysis | The benefits of and barriers to focusing on achieving outcomes for a particular group of patients and the likely stakeholder support for the shift in focus |
| Process analysis | Exactly what the entire patient pathway is now and how the pathway could be more efficient and more effective for patients |
| Critical appraisal of evidence | Current best practice processes of care associated with best outcomes |
| Benchmarking | What the organizations that are achieving the best performance of patient outcomes for a given condition do and how they do it |
| Focus group or discovery interviews | First-hand from patients on which outcomes are of most value to patients and from staff on how they perceive the way care is delivered now |
| Analysis of existing data | How the organization performs in relation to outcomes for a given patient condition using quantitative measures |
| Surveys | Patient or staff views about current services and the importance of a range of possible outcomes Staff perceptions of benefits of and barriers to working in a service integrated to deliver patient outcomes |
| Clinical audit | The aspects of process that could be improved through a more integrated approach to delivering patient care |
| Run charts or control charts | Monitoring of the effectiveness of changes in practice and in performance as the service is changed |
| Activity-based costing and demand and capacity analysis | The cost of current services and the gap between current demand and capacity for a given service |
| Fishbone diagram or asking why five times | Causes of problems uncovered through measurement of current practice that would have to be addressed to achieve value-based care |

How to carry out a value-based health care QIP — The practical steps

They key steps in carrying out a value-based health care QIP are as follows.

- Select a well-defined **patient group** or condition as the subject for the QIP. Use patient values to guide the decision on the outcomes
- Agree on the exact **outcome** points you will focus on for the QIP.

- Use QI tools to understand exactly **how care is delivered** for the patient group or condition, including **costing the care** provided for a patient in the group or with the condition.
- Identify what intended **outcomes** are **not being achieved** now and why.
- **Act** to implement changes in practice to achieve intended outcomes at the lowest possible cost.

Directions for carrying out a value-based health care QIP are in the box⁶ on the next page.

How to carry out a value-based health care QIP

1. Select a **patient group** for the QIP. Choose a patient group with the same diagnosis or condition or having the same procedure or treatment.
2. Create a **multiprofessional team** to work on the QIP, including representatives from all the clinical and non-clinical staff groups that are involved in the care of the selected patient group. Include a senior clinician who routinely provides care for the patients in the group and staff who can support the work of the team.
3. **Invite patients** or carers that are part of the patient group to work with the team.
4. Agree on other **stakeholders** in the services involved in the care of patients in the group and in the organization and ensure that key stakeholders are **represented** in the team or **will support** the team's work. Invite other people to join the team as appropriate.
5. Describe the care 'cycle' for the patient group, that is, the exact entry point of patients in the group to the healthcare organization and the **definitive outcome/s** for the patient group and when the definitive outcome/s is/are best assessed.
 - Use data gathered from patients about the **outcome/s that is/are important** to the patients, such as through a focus group or discovery interviews.
 - Use survey data to inform the team about **patient experiences of care** in the past.
 - Agree on **explicit measures of outcome/s** to be used for the QIP.
6. Gather and appraise **evidence about best practice** related to the care of the patient group.
7. Synthesize the evidence into a **process diagram** to show the **best pathway of care** for the patient group.
 - Use **benchmarking** with other healthcare organizations thought to be 'best' to identify the best process being implemented for the patient group.
 - Compare measures of outcome/s with benchmarking partners if possible.
8. **Analyse the current process** in detail, using detailed and cross-functional process maps, to identify all the activities and steps in the current care cycle, including key interfaces among clinical services.
9. **Identify any gaps** between the current process and the best process identified from evidence of good practice.
 - Identify if any gaps between the current process and the best identified process for the patient group are influenced by the **demand** on the service **and** the **capacity** of the service to meet the demand.
 - Compare demand and capacity with benchmarking partners if possible.
10. Calculate the **total and unit** (patient) **cost** of the care for the patient group.
 - Cost the entire care cycle as care is presently delivered.
 - Cost the care cycle for the most effective and efficient process.
11. Identify the specific **change interventions needed to implement** the **most effective and efficient process**.
12. Carry out a **force-field analysis** with key stakeholders to gain commitment to implement the changes needed.
13. Plan and **implement** the **changes** needed to deliver value-based care for the patient group on a pilot basis.
14. **Measure the effects** of implementation of the changes on outcomes, process steps, patient experience and cost.
15. **Make adjustments as needed** to the changes implemented to achieve value-based care.

The way forward for value-based care and QI — Combining the purposes

In many healthcare organizations, value-based care projects and QI projects are supported by different teams of staff and are seen as unrelated

activities. However, the purpose of value-based care is to benefit patients, as is the purpose of QI projects. It makes sense to combine the two ideas and use QI tools in a systematic way to achieve value-based care.

References

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