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REVIEW

Making a business case in healthcare: the value of careful consideration

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Abstract

A well thought-out business case offers an opportunity for clinicians to bring about evidenced-based change in clinical practice. It is a powerful tool that can have a significant impact on healthcare services and patient outcomes, while also offering desirable solutions to the NHS, which is facing growing healthcare demands on increasingly limited resources. The role of a business case is to justify the need for change, argue its value, gain support from leadership and illustrate how it can be sustainably implemented.

This article guides clinicians through the process of producing a successful business case using the five-case model, which can be applied to the majority of improvement projects or services in healthcare settings. Clinicians might use this guide to support the development of a case to make a change in their own workplace or to help them take a full part in wider system changes.

Key words: Business case; Delivery of healthcare; Economics; Medical; Patient care; Quality improvement

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Introduction

The key to turning a good idea into reality is a strong business case. The framework presented in this article will maximise the chances of producing a successful business case, irrespective of the clinical area and scale of the proposal.

When making a business case in healthcare, it is vital to ensure there has been robust evaluation of whether a proposed project or programme meets defined goals through an understanding of the costs, benefits and achievability. This is because a project or programme will only deliver on its goals if it has been properly scoped, planned for and valued in terms of cost and benefit. In essence, a business case is to decisions on the investment of funds what an evidence-based study is to decisions on appropriate patient care. It can be used to ensure the best use of finite resources and therefore value for money when either renewing or developing a new service. A business case could be as little as one page long or run to 100 or more pages, depending on the complexity of the proposals and the level of investment sought. The best business cases follow a clear structure to make a compelling argument to gain support and obtain buy-in from key decision makers.

Where are business cases used in healthcare?

Business cases are used anywhere where investment is required to make a change. They can be developed to support service or care model changes within a single organisation or across multiple organisations, investment in estates including refurbishment and new developments, or projects to support quality improvement in clinical settings.

Clinicians could be involved in developing a business case to advocate for a service change, providing a clinical perspective to a wider service change or estates investment, or be part of the governance and scrutiny of business cases in their trust, sustainability and transformation partnership or integrated care system.

What makes a good business case?

A business case needs to make a logical, clearly articulated and evidenced case for a course of action. Moreover, a good business case will tell a compelling story that brings decision

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makers into the vision of how the scheme will benefit patients, staff, the organisation and the system alike. However, many organisations have specific requirements for how a case should be structured and the information it should contain.

NHS England (2018) provide guidance on what needs to be included in a business case and more specific advice for capital investment in estates or technology business cases. A trust or sustainability and transformation partnership may also have their own rules or formats to follow. Following the guidance in this article will give a good chance of having a successful business case irrespective of the specific requirements.

HM Treasury (2020) provides a gold standard approach to the development of business cases in situations where public spending occurs. Many public sector organisations, including the NHS, use this approach as the requirements provide a useful structure for anyone wanting to develop a compelling and logical argument for the investment of funds into a new or existing project or programme. This approach is built upon the 'five-case model', where five aligned reports on the risks and benefits of the project or programme are developed alongside each other, each one focusing on a specific part of the proposal (Figure 1). Although this can seem onerous the level of detail in each case should be proportionate to the investment sought.

The five-case model of business case development

The strategic case

The strategic case outlines a case for change, setting the story for why the project or programme is needed. It articulates why the current situation needs to change and what

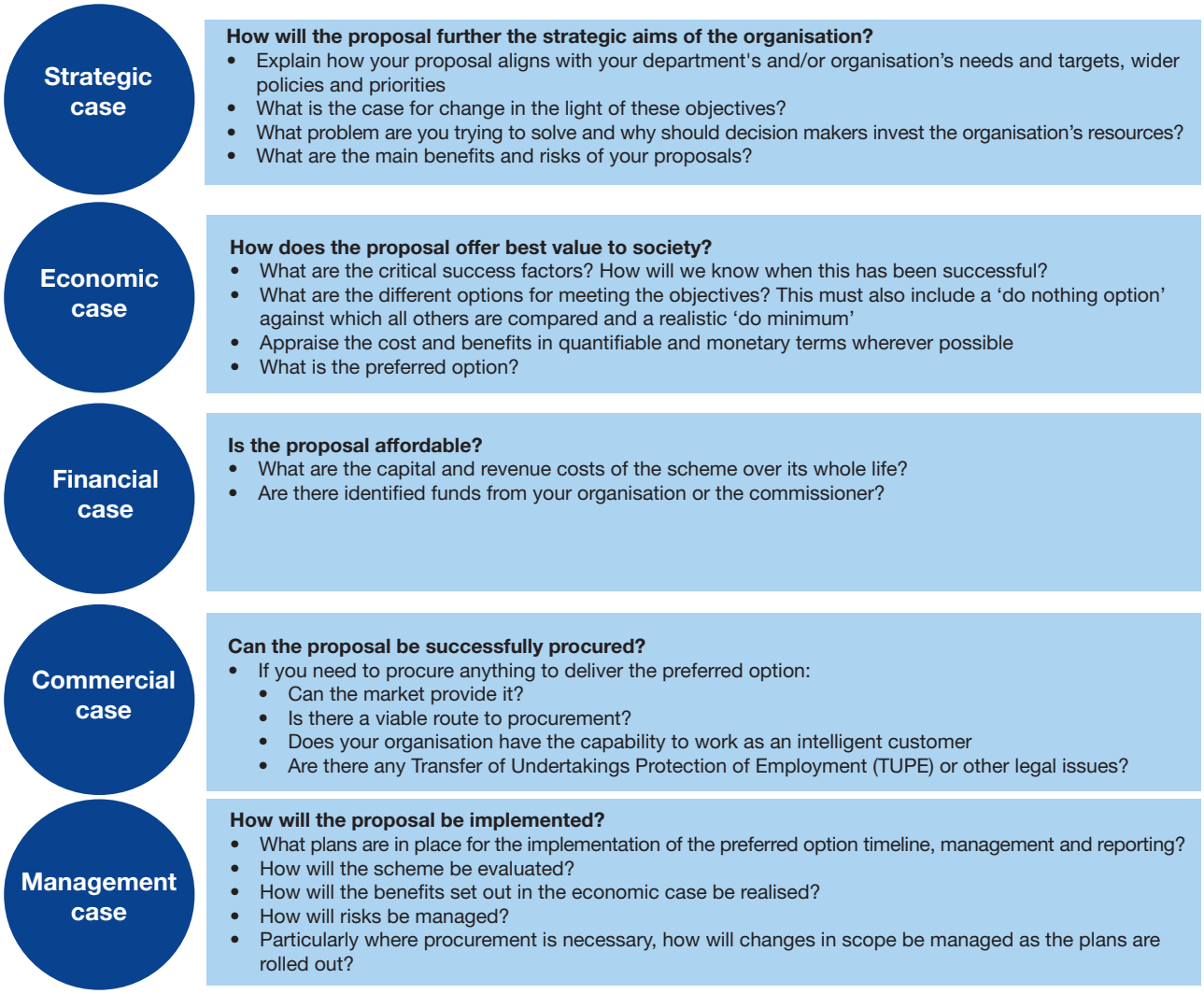

Figure 1. The five-case model of business case development, adapted from HM Treasury (2020).

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benefit it might achieve for patient care, workforce wellbeing, finance, strategic alignment and the healthcare organisation (HM Treasury, 2018).

To make a strong case for change there must be a clear understanding of specific, measurable, achievable, relevant and time-constrained objectives. To be able to form the strategic case, a number of key stakeholders or participants need to come together to better understand the programme objectives and the benefits, including the senior responsible owner of the project or programme, a project manager and other necessary advisers. These stakeholders need to articulate an understanding of the current situation (known as 'business as usual'), the business needs and opportunities, potential scope and the organisation's capability to deliver as well as the potential measurable benefits, risks and dependencies. An example of a strategic case could be for a quality improvement programme that aligns with a trust's strategy, confers benefit to outcomes and experience, and has evidence supporting the case through audit (Table 1).

The economic case

The economic case allows for the appraisal of different options for delivering the goals and will lead to an understanding of which option provides the maximum value to the public. The identification of a preferred option is key. Demonstrating value to the public includes understanding the impact of the project or programme on social and environmental factors. For example, a scheme involving the use of telehealth to reduce outpatient appointments could claim positive environmental impact, but issues around digital exclusion for those with reduced digital capabilities could be a social cost. To be able to shortlist realistic options, critical success factors (preferably objectively measurable) need to be defined although reasoned arguments can also be made. These might include ease of implementation, lower cost or maximum patient engagement. The options also require a cost–benefit analysis to identify best value for money. There may be a need to justify a higher cost option, or a change

Table 1. Reducing the incidence of ventilator-associated pneumonia on an intensive care unit

Background	In 2005, the Institute of Healthcare Improvement launched a nationwide effort in the United States of America, 100K Lives, with a goal of saving 100 000 lives over 18 months. This involved instituting six interventions, of which one was to reduce the incidence of ventilator-associated pneumonia (McCannon et al, 2006). To implement a ventilator-associated pneumonia protocol, an intensive care unit may have asked for project management and financial support to start the project
Strategic case	The ventilator-associated pneumonia bundle has proven to save lives in similar institutions by significantly reducing the incidence of ventilator-associated pneumonia
Economic case	There would be a clear demonstration of the department's approach to quality and safety, and staff would feel empowered to make a difference for their patients
Financial case	There is a demonstrable positive return on investment. Between 10 and 28% of ventilated patients develop a ventilator-associated pneumonia (Vincent et al, 1995). Of these approximately 50% die. On average, patients with ventilator-associated pneumonia have an increased length of stay amounting to 4–6 days on average. Estimated excess costs could be as high as £6000–£22 000 per patient (Pittet, 1994). Implementing a ventilator-associated pneumonia bundle has the potential to reduce mortality and length of stay, which in turn would impact patient flow and bed availability. The financial requirement for project support in instituting a ventilator-associated pneumonia bundle is estimated as £15 000 if a registered nurse served as a project manager 1 day a week for 9 months. The total estimated cost would also include educational materials, wages and contingency for expenses that have not been anticipated
Commercial case	A suitable nursing candidate with an interest in pulmonary infection could be pre-selected and approached
Management case	To effectively implement the ventilator-associated pneumonia bundle, the staff nurse would be required to be off nursing duties for 12 hours a week and would audit care against standards before and preceding intervention. They would develop staff teaching and communication tools and hold education sessions for the multiprofessional team. They would provide a monthly report detailing progress to the intensive care unit governance team. The anticipated project risks could include staff sickness or capacity – being pulled into clinical duties on a non-clinical day. Contingency for this would include a report to the intensive care unit governance team should a staff nurse anticipate difficulties
Additional points	Smaller projects like these involve decisions being made at a department or directorate level. The key decision makers are usually the budget holders for the department and would include the general manager and or directorate lead

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from business as usual if there is evidence of significant improvement in patient outcomes for example (Table 2). Options should always be compared not just against each other but against the option of making no change from the status quo – the 'do nothing' option.

The commercial case

The commercial case considers any services or resources identified by the strategic and economic case that needs to be procured, of which the cost feeds into the financial case. It highlights viable options that can result in a good deal between the public sector and the service providers, whereby there is a fair distribution of the risks in building, funding and delivering a project or a programme between the public (the taxpayers) and private sector. As a public sector entity, it is important to try to anticipate how value to the public can continue or be secured in the face of these risks.

The financial case

The financial case weighs up and demonstrates the affordability of the preferred option and what the impact will be on the public sector budget. It also outlines the funding requirement and provision and as with great business cases, it identifies and resolves potential gaps in funding that may occur during the lifespan of the proposed work. The financial case needs an understanding of the capital and revenue costs of the proposal and will be of interest to the chief financial officer, department leads and other budget holders depending on the scale of the investment required.

The management case

The management case is key to successfully demonstrating that a plan is in place to deliver, monitor and flex the progression of work to ensure a project or plan comes to fruition. It should cover key areas such as: how will the project or programme be managed? What governance structures will be in place and used to ensure progress at a good pace? Who else might be needed or called upon to ensure successful delivery of the project? Demonstrating that the preferred option can be delivered and that any investment into a scheme will not be money wasted requires all these questions to be considered and answered.

Linton et al (2019) carried out a thematic analysis of healthcare-related business case guidance documents and business cases to identify key quality indicators when developing and interpreting business cases in healthcare. The seven themes identified were purpose, strategy, options, risks, costs, benefits, and evaluation. These were all found to act as critical quality considerations when structuring a proposal, ultimately strengthening any business case. Such a quality indicator framework is clearly well embedded in the five-case model.

Complex cases and wider strategic programmes

More complex or expensive projects, perhaps where the process of decision making itself is likely to be costly and protracted because of the due diligence required, often go through several stages of business case development, each more detailed than the last. The HM Treasury (2018) describe the three main stages:

1. Strategic outline case – scoping the scheme: making the case for change, exploring the preferred way forward and justifying the scheme
2. Outline business case – planning the scheme: determining the potential value for money, ascertaining the affordability and the requirement for funding, planning for successful delivery of the scheme
3. Full business case – procuring the solution: procuring the solution that delivers value for money, developing appropriate contracts, ensuring successful delivery.

These stages provide a process by which a scheme can be tested as a concept at a high level, followed by further scrutiny as the practical details of the programme emerge. The main aim is not to find the preferred option for a scheme but to provide an opportunity to stop a scheme that is not viable before very detailed work is done and wasted. Examples include estates investment business cases (building a new hospital) or business cases for major service reconfiguration (eg redesigning the provision of stroke care across a health economy or geography) where multiple stages of consultation will be required (Table 3).

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Table 2. Business case for investment in surgical robots to develop robotic-assisted surgery

Background	Robotic-assisted surgery is fast becoming the new norm of minimally invasive surgery, where surgeons control the robot with fine dexterity allowing improved precision, vision and control for complex operations. It enables surgeons to better access difficult to reach areas compared to laparoscopy. It is associated with many benefits, including improved patient outcomes and satisfaction, reduced length of stay in hospital, improved ergonomics and thereby reduced risk of occupational injury, and better training facilities with shortened learning curves for complex procedures		
Strategic case	Investing in surgical robots would allow continued expansion of robotic-assisted surgery. This aligns with the national vision of improving access to minimally invasive surgery, which is associated with improved patient outcomes (Close et al, 2013; Kowalewski et al, 2020)		
Economic case	Invest in surgical robots	Advantages	■ Improved patient outcomes with a reduction in blood loss, stress response and pain. This translates into lower complication rates, faster recovery, and thereby reduced length of stay in hospital (Guillou et al, 2005) ■ Reduced use of critical care beds ■ Improve access and equity to minimally invasive surgery for patients within geographical region ■ More ergonomic, so reduced risk to workforce of occupational injury ■ Faster training in complex procedures compared with conventional laparoscopy ■ Improve job satisfaction, staff retention and recruitment ■ An opportunity to become a recognised robotic-assisted surgery training centre, offer fellowships, build on reputation
		Disadvantages	■ Cost and funding of initial and recurring costs ■ Procurement and availability of equipment ■ Need special decontamination service
	Option of do nothing	Disadvantages	■ No improvement in patient outcomes ■ Patients choose to go to other hospitals have minimally invasive surgery for their condition ■ Difficult to recruit and retain high calibre staff, less attractive for trainees ■ May lose services, eg cancer services, as there is a push for robotic-assisted surgery
Financial case	Capital cost		■ Robotic surgery equipment (one Da Vinci xi ~£2 200 000) ■ Training (included in purchase price) ■ Decontamination equipment and service (~£150 000) ■ Electrical infrastructure cost (~£5000/robot)
	Annual revenue cost		■ Consumables + maintenance (~£500 000 per year per robot) ■ Robotic coordinator: band 7 nurse
	Mitigation of cost		■ Retention of staff, reduced number of locums or temporary staff ■ Significant reduction in length of stay, critical care bed occupancy, complications and need for blood transfusion, revision surgery ■ Reduced operating times and increased theatre efficiency
Commercial case	■ Procurement route of above specified equipment and services ■ Da Vinci system widely used in the UK and adheres to regulations ■ Procurement plan to be outlined with target dates of purchase and implementation ■ Recruitment of staff: manager, coordinator, steering group to be confirmed		
Management case	■ Reporting and governance arrangements to be outlined ■ The steering group is responsible for procurement and implementation of equipment ■ Appointed manager is responsible for training of staff, clinical governance for surgical procedures, patient information, scheduling, delivery and installation ■ Evaluation of progress against implementation plan will be carried out by steering group ■ There will be comprehensive analysis to evaluate technology, manage any risks and respond to adverse events immediately		

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Table 3. Implementing a mechanical thrombectomy service to become the regional thrombectomy centre

Background	Stroke is a significant cause of mortality and ongoing disability, where 50% of survivors are left with long-term disability. Around 85% of all strokes are ischaemic, and mechanical thrombectomy is an effective acute treatment in patients with large artery occlusion (National Institute for Health and Care Excellence, 2016). When mechanical thrombectomy is carried out within 6 hours from onset of symptoms it significantly reduces disability at 90 days. The number needed to treat to reduce disability is 2.5 and the average length of stay in hospital is almost halved from 12 days to 6.5 days (Goyal et al, 2016). To implement a mechanical thrombectomy service within a trust the service development team may have started by making a strategic outline case for a thrombectomy pilot, which will thereafter be evaluated and form a vital part in securing additional funding to implement the service		
Strategic case	There is huge national support to make mechanical thrombectomy available for those who are eligible as it significantly reduces disability, improves patient outcomes and is highly cost-effective. Currently there are no mechanical thrombectomy services available to patients within this geographical region		
Economic case	Become regional thrombectomy centre	Advantages	■ Patient safety as mechanical thrombectomy delivered timely at local hospital with no requirement for retrieval by ambulance ■ Length of stay will be significantly reduced and directly benefit the trust ■ Increase job satisfaction and retention, strengthen multidisciplinary relationships ■ The trust will gain a recognised accreditation ■ Cost effective: incremental cost per quality adjusted life year over a 20-year period is £7000. Of patients receiving mechanical thrombectomy, 38% have a less disabled outcome and 20% achieve functional independence (Ganesalingam et al, 2015)
		Disadvantages	■ Impact on intensive care unit, anaesthetics, interventional radiology ■ Initial cost (equipment) and ongoing investment in training and service provision
	Alternative 1: Recommission service at other trust	Advantages	■ Training, additional staffing and equipment costs will be avoided ■ No impact on intensive care unit, anaesthetics and current interventional radiology services
		Disadvantages	■ Potential delay to treatment and patients not getting timely treatment ■ Cost of commissioners, who are likely to only offer a limited capacity ■ It goes against NHS England's vision of local services ■ Unable to generate cost-savings associated with thrombectomy care and lose out on funding from NHS England
	Alternative 2: Option of do nothing	Disadvantages	■ Patient access inequality, patient safety and associated poor functional outcomes ■ Burden for families ■ Increased cost because of increased length of stay in hospital and social care, impact on bed availability ■ Failure to treat patients as per national guidance, unable to deliver best stroke care with adverse morbidity and mortality outcomes
Financial case	Full financial modelling will be based on the pilot and will be completed if there is a decision to implement thrombectomy services. It has been estimated that on average, one patient treated would save the NHS £47 000 over 5 years (Ganesalingam et al, 2015). For that reason, NHS England will pay the trust £12 150 per treated stroke patient. The cost impact includes: ■ Training of interventional radiology consultants ■ Backfilling of interventional consultants, stroke, anaesthetic consultants, operating department practitioners, interventional radiology nurses, stroke nurses to look after patients post-procedure ■ Training and governance package ■ Additional interventional radiology equipment specific to mechanical thrombectomy ■ Consumables and anaesthetic equipment		

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Table 3. Implementing a mechanical thrombectomy service to become the regional thrombectomy centre (continued)

Commercial case	Training of staff across departments (radiology, stroke, anaesthetics, nursing) and on-call rota with adequately trained staff to be provided. Interventional radiology suite to be equipped with digital subtraction angiography, mechanical thrombectomy kit and anaesthetic machine and equipment. A dedicated recovery area with trained nurses will also be needed
Management case	To successfully implement mechanical thrombectomy services the trust will: ■ Aim to become an accredited thrombectomy centre within 1 year ■ Align with audit requirements ■ Do a full evaluation of pilot before moving onto next stage. Full evaluation of the pilot will assess the following for the full business case: ■ 30-day mortality and morbidity ■ Working hours compliance, training and support, impact on other clinical areas ■ Guidelines and policies in place Cost: initial and ongoing investment in training and providing services, additional staff required for service implementation

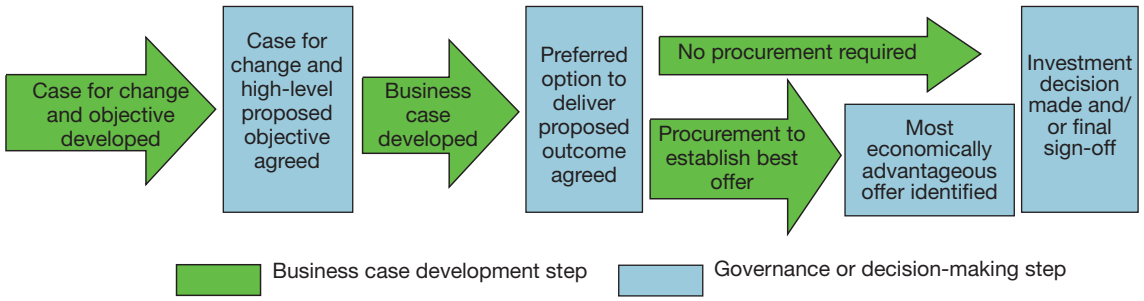

Figure 2. The stages of business case development for complex change.

There are specific requirements for the level of detail required at each stage and they may be adjusted by the board or organisation evaluating the business case. The majority of business cases that clinicians will be involved in developing will not be split into formal stages like this but will follow a process similar to that shown in Figure 2.

Presenting the business case

Take the opportunity to present the idea and therefore the business case at the relevant decision-making meeting. Telling the story of the proposal, showing belief in the strength of the project and providing an opportunity for key decision makers to ask any questions or clarify points – making the business case 'human' – has a great impact on the ability to secure the support required for change. This said, a well-structured, evidenced and eloquent business case is essential as this effectively communicates arguments to senior managers and clinical directors.

Conclusions

To be regarded as successful, a business case must meet strategic, economic, financial and feasibility criteria while at the same time gaining buy-in. It needs to be evidence based with sufficient details on benefits and costs to enable decision makers to come to informed decisions, ensuring effective implementation of a financially viable service or project development. A strong business case should also tell a story of the greater vision. The case for change should be palpable throughout the five-case proposal to win support. The business case will gain support if it is written to be read by the key stakeholders and by engaging those who are having to change as a result (patients and staff alike) early on in the process.

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Key points

- The role of business cases in healthcare is to improve patient care outcomes through evidence-based and cost-effective changes.
- Clinicians might be involved in business cases to advocate for a service or project, provide a clinical perspective to a wider service change or investment, or be part of the governance and scrutiny of business cases in their trust.
- A successful business case must include a robust evaluation of whether a proposed project or programme meets defined goals through an understanding of the costs, achievability, benefits and potential risks.
- The five-case model provides a good framework for the development of a business case.
- Business cases may be used for quality improvement projects, development and expansion of a service programme, or for more complex ideas such as estates investment or major service reconfiguration, as exampled in the attached case studies.

HM Treasury's five-case model provides an excellent framework when writing a business case in healthcare, regardless of the scale or clinical area of the proposal. It covers the fundamentals and it further incorporates key quality indicators for business cases in healthcare settings.

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Conflicts of interest

The authors declare that there are no conflicts of interest.

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