KPMG

Should we rent or buy equipment?

kpmg.com/nz

Ten questions to help you decide

Selecting the right equipment is an important decision in the provision of good quality healthcare. However, the decision-making process doesn't stop there. Capital expenditure and procurement processes need to ensure that good care is also good economics. At KPMG, we believe both are possible and have designed a short list of questions to help you achieve this.

QUESTION 1

Is the equipment suitable for purpose?

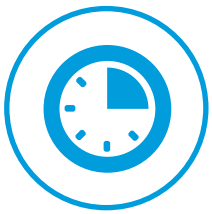
PROBLEM

Many patients have specific needs, e.g. high BMI. Using standard equipment can result in damage or injury. Often, staff are unaware of equipment limitations or use, or adaptations are required, e.g. low-low beds.

SOLUTION

Only choose equipment that is certified by suppliers, e.g. weight, mobility.

QUESTION 2



Is the right equipment available when needed?

PROBLEM

The unavailability of equipment can lead to poor patient outcomes, treatment injury, and risks to staff. Our duty of care requires access to a flexible equipment pool.

SOLUTION

Use a rental pool for more specialised equipment, but it must be available 24/7 within 60 minutes.

QUESTION 3

Will the equipment be fully utilised?

PROBLEM

Sometimes expensive or specialised equipment sits idle, or is being utilised by another ward or department when needed.

SOLUTION

For everyday equipment, purchase is often best. If the equipment is used less than 50% of the time or for periods of peak demand, then rental should be considered.

QUESTION 4

Do you need additional treatment/care items at the point of delivery?

PROBLEM

Patients don't just need equipment, they also need drapes, dressings, ointment, cushions, commodes and other items.

SOLUTION

Use treatment bundles as a Standard Operating Procedure to ensure that a patient has what they need when they need it.

QUESTION 5

How do I know the equipment is right for the patient?

PROBLEM

There is a risk that patients are prescribed equipment they don't need, or cannot access equipment they do need. In addition, assessment tools are often complex or require considerable time and skill to complete.

SOLUTION

Ensure that the equipment comes with simple (e.g. electronic) assessment tools. Also ask for a money-back guarantee from your supplier.

QUESTION 6

Are staff (e.g. nurses) trained and up-to-date in the use of specialist equipment?

PROBLEM

In-house trainers or senior staff are often not available when required, yet people learn best on the job.

SOLUTION

Ensure that on the job training and support is part of any rental or supply agreement, and a qualified trainer is at the point of equipment delivery.

QUESTION 7

Do you know the whole-of-life cost of your equipment?

PROBLEM

The purchase price of equipment is only part of the cost. Equipment needs to be serviced between patients, checked, maintained, and stored. Hospitals also forget about the costs of ordering, stock control, and replacement programmes. This can make the whole-of-life cost expensive.

SOLUTION

Compare whole-of-life costs in any rent or buy decision.

QUESTION 8

Have you considered staff safety?

PROBLEM

Lifting and manoeuvring around equipment are the most common causes of injuries in hospitals. Under the Health and Safety at Work Act 2014, managers and supervisors have a personal responsibility to ensure their staff are not injured at work.

SOLUTION

Use purpose-built, well-maintained equipment with in-built safety features, and onsite training support.

QUESTION 9

Am I locked into one supplier?

PROBLEM

Most suppliers only carry and promote their own range of equipment. Supplier agreements often limit the range of equipment available or make it difficult to tailor to patient needs.

SOLUTION

Select a supplier who can access a variety of brands, and carries a wide range of specialist equipment.

QUESTION 10

Could I be overcharged?

PROBLEM

Being charged for equipment that has passed to another ward or department, or is not being used. This an unnecessary cost for hospitals.

SOLUTION

Ensure that all equipment has in-built tracking so it can follow the patient and be recovered when not in use.

Case study examples

The decision to rent or buy medical equipment can be supported by building a simple econometric model. This enables decision-makers to test scenarios and risk thresholds. The following examples show how this may be achieved.

Scenario 1:[1]

Equipment need with stable demand (a bariatric example)

Your hospital needs specialised beds for bariatric (high BMI) patients. An analysis of bed use shows that a bariatric bed is used an average of 100 days per year. It also shows that only one specialty bed is expected to be utilised at any given time. Each bed has an asset life of five years.

Implicit question

Will it be cheaper for your hospital to rent or buy beds assuming utilisation remains even (i.e. only one bed is utilised per day)?

Modelling the break-even

Figure 1 illustrates a comparison between renting and buying bariatric beds. The x-axis represents the days in a year, and the y-axis the average annual cost of a bed over its lifetime.

The horizontal lines represent the average cost of ownership under two scenarios:

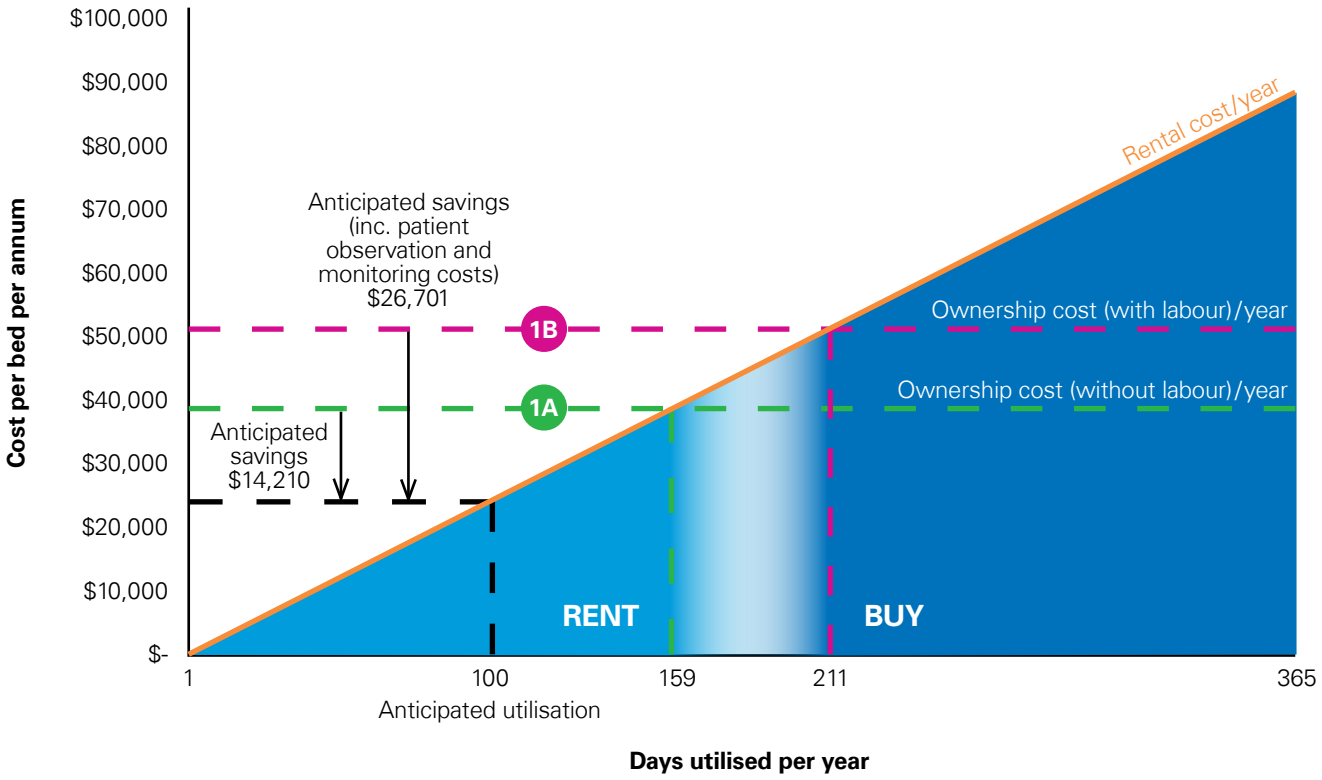
— **Scenario 1A:** No additional labour requirements.

— **Scenario 1B:** Additional labour requirements.

[1] **Model limitations**: Outputs and recommendations by KPMG are to provide an indication only. Our estimates are based on the best available information publicly available but should not be relied on. For a more detailed costing analysis tailored to your organisation, contact KPMG at www.kpmg.co.nz.

Figure 1

Rent vs. buy comparison (a bariatric example)



What does this tell us?

At an average utilisation of 100 days per year, the average rental cost is $24,000 per bed per annum, compared to ownership costs of $38,210. This means a saving of $14,210 per bed by renting on an 'as required' basis. Under this scenario, renting will continue to be the best option up to an average utilisation of 159 bed days per year.

Scenario 1B factors in additional labour costs (i.e. nurse/carer) for observation, assistance and monitoring of bariatric patients. This example highlights the importance of including labour costs and 'bundled service' (i.e. where rental beds come with additional services such as cushions, commodes and monitoring) to ensure a fair comparison.

In this example the annual cost of ownership increasing to $50,701 per bed per annum. This has the effect of changing the rental benefit threshold from 159 days to 211 days. Under this scenario, your hospital would save $26,701 per bed per annum by renting a bed bundle up to the threshold.

Scenario 2:
Equipment need with variable demand (a falls example)

Your hospital needs specialised beds for fall-risk patients. An analysis of bed use shows average bed usage of 100 days per year, however, a variable number of beds are required each day. This is illustrated in Figure 2 below.

Your clinical staff want sufficient beds to give them 95 percent confidence that a specialised bed will be available when required. You have previously calculated that the number of specialty beds required per day ranged from five to 28, with an average of 17 beds per day.

You have also calculated that 25 beds would be required to provide a 95 percent confidence level to meet demand.

By comparison, renting on an 'as required' basis would allow an average of only 17 beds per day to provide a 95 percent confidence level to meet the variations in demand. The next step is to calculate the rental threshold to see what the most economical option is.

Implicit question

Should your hospital buy 25 beds to meet the 95 percent confidence level, or rent on an 'as required' basis?

Figure 2
Equipment need with variable demand (a falls example)

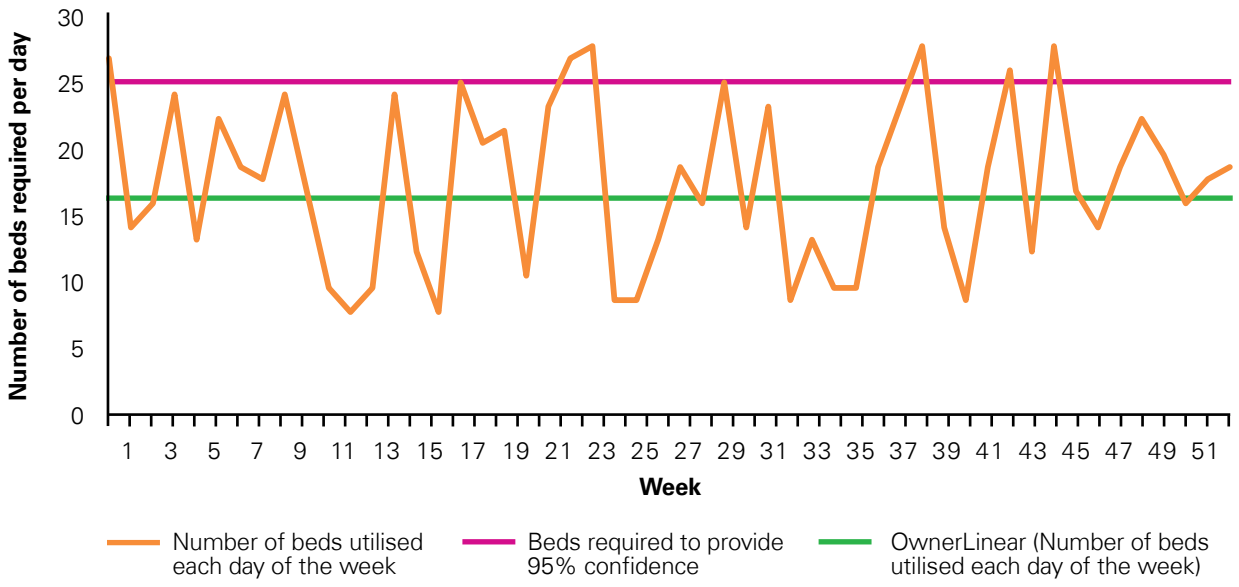
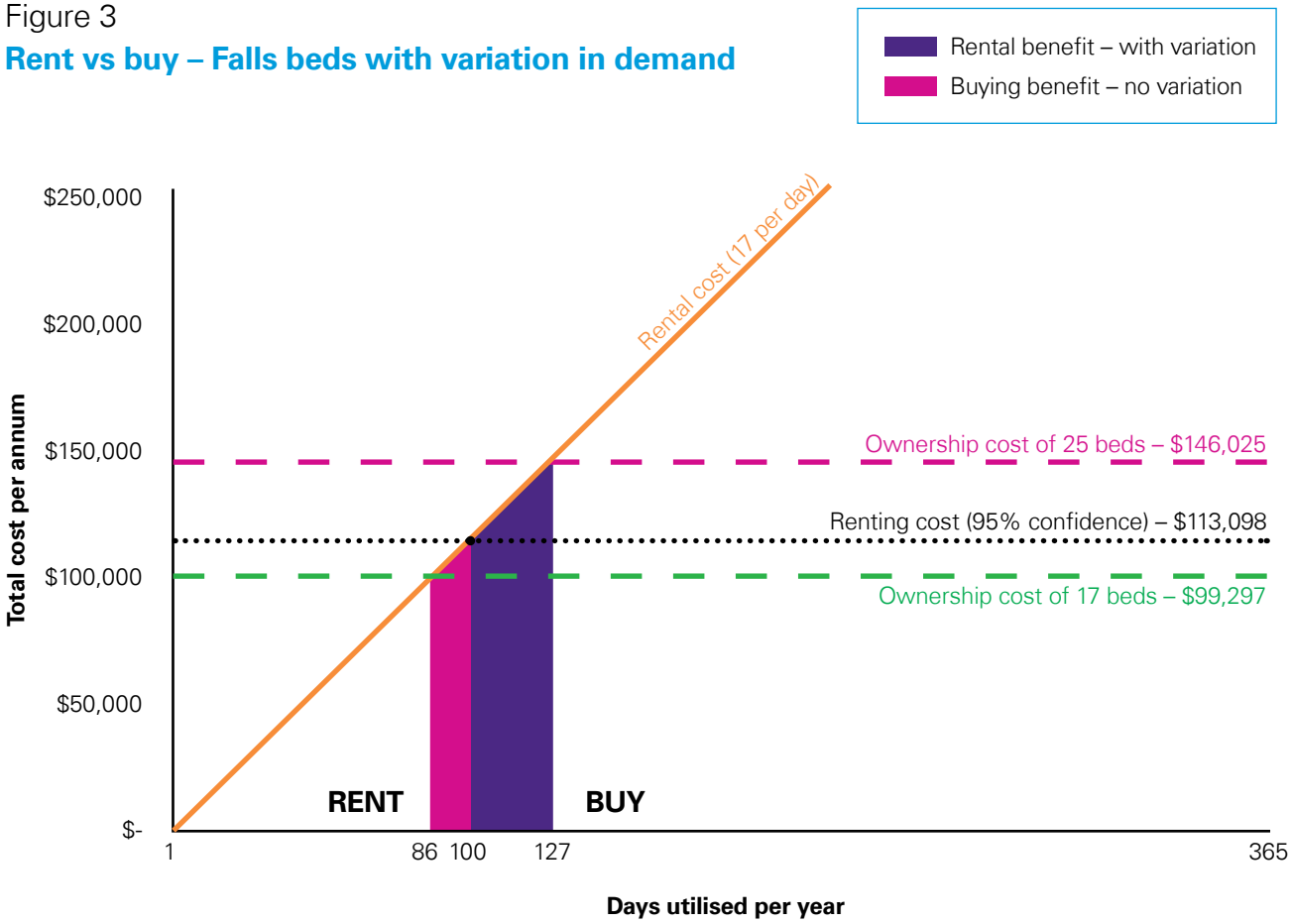


Figure 3

Rent vs buy – Falls beds with variation in demand



What does this tell us?

As illustrated in Figure 3, the x-axis represents the number of days utilised in a year, and the y-axis the annualised cumulative total cost to the hospital for renting or buying specialised falls beds.

The total cost of ownership for buying 25 beds is $146,025 per annum, with each bed utilised, on average, 100 days per year.

By comparison, renting beds on an 'as required' basis to meet fluctuating demand would also give a 95 percent confidence level but would cost the hospital $113,098 per annum. In this scenario, renting would result in savings of $32,297 per annum. For the purchase of 25 beds to be the preferred option, the average utilisation per bed would need to increase to over 127 days per year.

Conclusion

Matching what is best for the patient to what is best for the budget is always a challenge in a fast moving healthcare environment. This often puts finance and procurement staff at odds with clinical teams, and highlights the need for simple tools to support shared understanding and decision making.

This guide is designed to help both parties to ask the right questions, tease out the information, and make objective decisions without making the process more complex, time consuming or more expensive than it needs to be.


KPMG health, ageing
and human services
Building the business case
Service integration and governance
Measuring quality and outcomes
Managing projects successfully
Achieving value for money

Contacts

Andrew Tubb
Partner, Advisory
T: +64 9 363 3227
M: +64 21 615 602
E: atubb@kpmg.co.nz

Richard Catto
Director, Advisory
T: +64 4 816 4851
M: +64 21 188 4911
E: rcatto@kpmg.co.nz

kpmg.com/nz