



# ASSETMARK

## THE ASSET BENCHMARKING SYSTEM FOR HEALTH FACILITIES MANAGEMENT

### A Preview

The Institute of Hospital Engineering, Australia seeks to be recognised as an organisation that creates excellence in healthcare engineering. To assist facility managers to improve their facility management services, the Institute has taken the initiative of developing a hospital facility benchmarking process, called AssetMark. It takes into consideration a great many variables that have a bearing on the performance level of the asset management function.

### What benefits does benchmarking offer to hospitals?

Benchmarking provides the health industry with the opportunity to search out and implement best practice in facility management.

The aim is to achieve efficiency of operation and improve the quality of service delivery, **within existing resource constraints** and policy parameters.

Benchmarking gives the opportunity to put continuous improvement into real practice. As the performance of facility management in individual hospitals improves, the mean performance in hospitals improves and in time, the benchmark itself goes up.

#### ***Health Departments/National or State Private Health Providers***

The IHEA's benchmarking process allows large health providers to:

- Ø establish network/area/region and hospital facility management benchmarks
- Ø monitor network and hospital facility management expenditure trends
- Ø monitor the facility performance of state/national assets
- Ø develop supporting data in evaluation and comparison for ACHS accreditation.

## **Networks/Health Areas/Regions**

The IHEA's benchmarking process is effectively a structured continuous improvement program. It offers networks the opportunity to identify best practice and share this within the network. Support from another network or hospital can also be sourced where best practice is identified outside the network.

The process allows networks to:

- Ø establish performance benchmarks
- Ø monitor facility management expenditure performance
- Ø monitor facility performance
- Ø verify cost effectiveness
- Ø develop evaluation data for ACHS accreditation.

## **The Development of AssetMark**

The Institute formed a working group of experienced hospital facility managers to investigate available benchmarking systems. Due to the lack of viable hospital facility management benchmarking processes, the IHEA applied its industry experience to develop a process that was based on best practice.

A pilot questionnaire was developed to seek information relating to a range of key performance measures and other data. The performance measures selected were based on work done by the National Committee on Rationalised Building (NCRB) Asset Management Sub-Committee. Eighteen standard reports were developed, based on the key performance measures.

The pilot questionnaire and proposed benchmarking process were tested at the Royal Melbourne Hospital, Westmead Hospital, Royal Perth Hospital, Flinders Medical Centre, Royal Hobart Hospital and the Prince Charles Hospital. With the experience gained in this pilot project, the key performance measures were reviewed and the pilot questionnaire was amended. The questionnaire now has over 220 data points.

A database has been developed, and continues to develop, to make comparative analyses of the data and reporting. The database now facilitates the production of twelve standard reports and is capable of producing *ad hoc* reports for any combination of data points.

## **Valid benchmarking with AssetMark**

AssetMark recognises the differences that exist between hospitals and between similar hospitals in different states.

These differences can impact on cost structures, services and processes, and create differing parameters for benchmarking.

AssetMark deals with these complexities by classifying hospitals by:

- Ø Geographical information (6 types)
- Ø Service areas (50 types)
- Ø Hospital category (3 types)
- Ø Facility description.

The system can sort on these classifications, and concentrate on choosing from a pool of potential benchmarking partners that are similar enough to make comparisons meaningful.

AssetMark is administered by an independent consultant. The Consultant validates the data as it is entered into the database. The Consultant also monitors trends in the data on behalf of the Institute.

## The AssetMark Process

The steps in the IHEA benchmarking process are identified below. Steps 1 to 5 are the initial benchmarking Questionnaire processes and steps 6 to 8 are the inter-hospital benchmarking processes.

|        |   |
|--------|---|
| Step 1 | The hospital engineer requests an AssetMark questionnaire from the Consultant.  |
| Step 2 | The Consultant sends a Confidentiality Agreement to the participating hospital engineer to sign and return.   |
| Step 3 | An invoice is sent to the hospital engineer. Once payment is made, the Consultant sends the AssetMark questionnaire to the participating hospital engineer.   |
| Step 4 | The hospital engineer completes the AssetMark questionnaire and sends it back to the Consultant.  |
| Step 5 | The Consultant validates and enters the information into the database for analysis and reporting. The set of standard reports is sent back to the hospital engineer. The reports show the hospital's performance against the Key Performance Measures and how it compares with other hospitals. |
| Step 6 | The hospital engineer analyses the questionnaire results and decides whether inter-hospital benchmarking is appropriate.  |

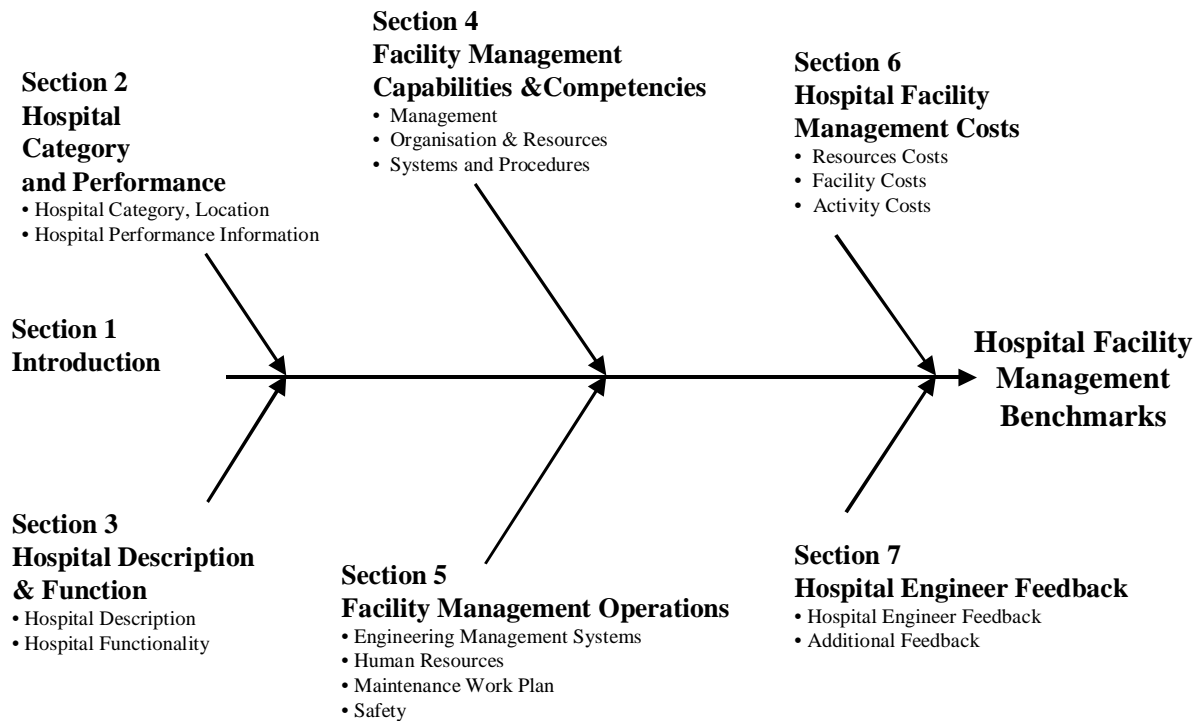
|        |   |
|--------|---|
| Step 7 | If the hospital engineer decides to proceed with the benchmarking process, he/she contacts the Consultant to identify possible benchmark partners from the database. The hospital can be partnered for benchmarking with another hospital according to where the greatest benefit can be gained. The Consultant contacts the potential partner/s and advises them of the opportunity to benchmark with another hospital engineering team. If they agree to participate, the Consultant will advise the first hospital engineer of the identity of their partner.                |
| Step 8 | <p>The hospital engineering partners initiate the inter-hospital benchmarking process.</p> <p>This may involve the following steps:</p> <ul style="list-style-type: none"> <li>Selecting and training teams</li> <li>Preparing for visits</li> <li>Conducting the visits</li> <li>Interpreting findings and committing to implement</li> <li>Consolidating findings into improvements.</li> </ul> <p>(Recommended reading is the 'Benchmarking Self Help Manual' by Enterprises Improvement Services. This is available from Commonwealth Government Bookshops and Agents.)</p> |

Finally the facility manager can, if they decide, initiate a follow-up survey with the Institute to review their improved performance and initiate additional benchmarking exercises as appropriate.

## The AssetMark Questionnaire

The hospital facility management service is extremely complex and covers a broad range of hospitals, facilities and engineering disciplines. Customers' expectations are also changing as continuous improvement takes place in the industry.

The AssetMark questionnaire includes a broad range of hospital facility management performance measures, both objective and subjective.



The information from the questionnaire is monitored to ensure a comprehensive database of information is available to support the benchmarking process. From this range of data, non-standard reports or special investigations can be provided.

The AssetMark Questionnaire consists of the following 7 sections:

**1 Hospital details**

This section seeks details to identify the hospital and the activities the facility manager is responsible for.

**2 Hospital description & performance**

This section identifies the hospital's type and environment and includes a brief history of the hospital. It also seeks information on the performance of the hospital as a whole, eg. annual expenditure, OBD, energy consumption.

**3 Hospital facility description & function**

This section seeks information on the hospital facilities, including service areas and an assessment of building functionality and maintenance service levels.

#### **4 Hospital facility management capabilities & competencies**

This section is subjective. It seeks the facility manager's perceptions about the performance of facility management strategies and practices. The section shows a range of practices, leading up to what is regarded as best practice. Facility managers are asked to nominate where their management performance rates on each scale.

#### **5 Hospital facility management operations**

This section seeks information on engineering management systems, human resources, maintenance work plans and safety.

#### **6 Hospital facility management inputs**

This section seeks information on the costs involved in managing hospital facilities. It classifies the costs in three ways: by resources, by facility and by activity.

#### **7 Feedback from facility manager**

This section is also subjective. It seeks the facility manager's feedback on general issues relating to hospital facility management.

## **Key Performance Measures**

The IHEA benchmarking process requires hospital engineers to identify quantitative and qualitative measures of Hospital Facility Management performance.

In selecting the Key Performance Measures, the IHEA has been mindful of the considerable range of indicators that exist for Hospital Facility Management, as well as the broad range of interpretations that exist due to the number of possible variables, such as hospital management policies, facility age and condition, service levels, etc. The performance measures also cover aspects of the work that are solely dependent on maintenance management policy, strategy and tactics.

The Key Performance Measures appear in the standard reports. The table below shows the Standard Reports generated by the AssetMark system.

The responses in the Questionnaire that are used to generate the Standard Reports are mandatory and must be provided by the hospital engineer.

If any of this mandatory data is not provided, AssetMark cannot generate the relevant Standard Report.

**These mandatory questions are highlighted in the questionnaire.**

## Sources of Data for Standard Reports

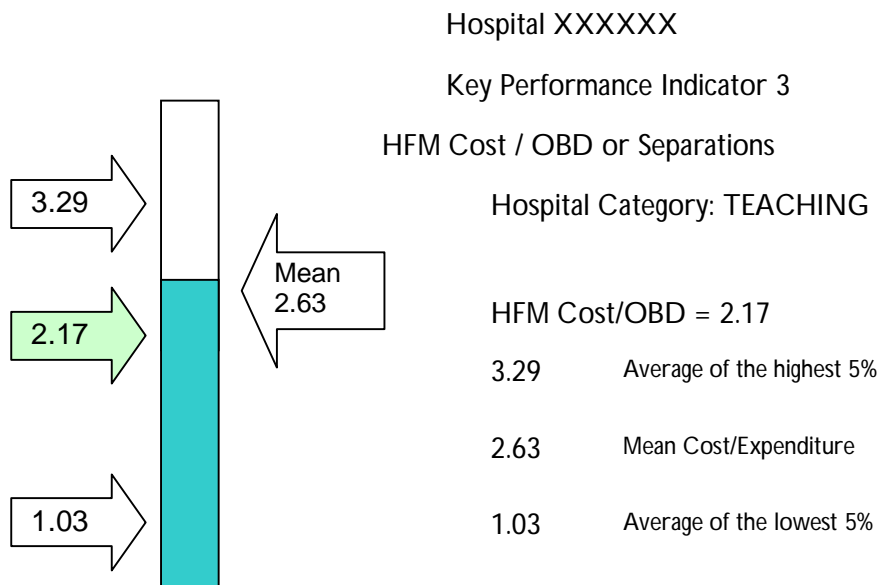
|    | Name of Report   | Measure               |
|----|--|-----------------------|
| 1  | Hospital Facility management (HFM) cost / Total floor area | \$/m <sup>2</sup>     |
| 2  | HFM cost / Occupied bed days (OBD) or Separations          | \$/OBD or Separations |
| 3  | HFM cost / Replacement Capital Value (RCV)                 | %                     |
| 4  | Maintenance output on preventative maintenance             | %                     |
| 5  | Maintenance output on corrective & reactive maintenance    | %                     |
| 6  | Energy consumption / Total active floor area               | GJ/m <sup>2</sup>     |
| 7  | Deferred Work / RCV  | %                     |
| 8  | Active floor area / OBD or Separations                     | m <sup>2</sup> /OBD   |
| 9  | Maintenance costs / Total floor area                       | \$/ m <sup>2</sup>    |
| 10 | Maintenance costs / OBD                                    | \$/OBD                |
| 11 | Maintenance costs / RCV                                    | %                     |
| 12 | Water usage index / Total floor area                       | KL/m <sup>2</sup>     |

## Deliverables of the AssetMark System

By completing the Questionnaire, the facility manager or network manager has the chance to take an objective look at the operations under their control. The Questionnaire has been designed to provide thought-provoking material that will help this process of analysis.

AssetMark produces 12 reports, showing the hospital's performance against comparable hospitals. The reports show the values for:

- ∅ the average for all records in the database;
- ∅ the average of the top 5% of hospitals;
- ∅ the average of the lowest 5% of hospitals.



The 12 Key Performance Indicators are based on the following data:

- Ø Hospital Facility Management cost
- Ø Maintenance cost
- Ø Occupied bed days or Separations
- Ø Replacement capital value
- Ø Maintenance output on preventive maintenance
- Ø Maintenance output on corrective & reactive maintenance
- Ø Energy consumption
- Ø Water usage
- Ø Deferred work
- Ø Total floor area
- Ø Active floor area.

By repeating the cycle, the facility manager sets up a process of continuous improvement.

AssetMark has measures that guarantee confidentiality:

- Ø Each hospital has a unique number that is used to identify it in the AssetMark database. The number is not available to anyone apart from the Consultant.
- Ø The AssetMark Consultant is party to a legally binding, comprehensive confidentiality and intellectual property contract with IHEA.
- Ø The results of the data analysis go directly to the facility manager.
- Ø The facility manager is not identified to a recommended benchmarking partner until the partner chooses to make contact.

Participating in this benchmarking process means the facility manager seeks out best practice by measuring their own performance and aims for best practice in the improvements that are carried out.

The facility manager contributes to improved health service delivery by making sure the performance of assets is in tune with hospital service delivery objectives.

AssetMark can analyse the database in areas of particular interest. It can help facility managers who wish to do specific research in any aspect of hospital facility management.

AssetMark allows comparison of:

Ø **one hospital or network with itself over time** - By repeating the cycle of completing the questionnaire, receiving reports, benchmarking with another hospital or network and implementing improvements, a hospital can watch its own progress over time, as well as seeing where it relates to industry performance at each point.

Over time, the hospital may improve against its own performance, but not keep track with general improvements in the industry, or perhaps it may improve so much that it outstrips the performance of the industry as a whole and sets a new industry benchmark.

Ø **one hospital or network with the rest of the industry at any given point in time** - The standard reports show this relationship.

Ø **one hospital or network with any other at any time** - As part of the benchmarking exercise, hospitals within networks can share information about their key performance measures. If requested, the AssetMark system can provide extra reports on areas of particular interest to both benchmarking partners.

Ø **industry trends over time** - AssetMark is able to produce information showing trends in the industry over time.

Ø **performance state by state**

Ø **national performance against international performance.**

## The Cost of participating in AssetMark

The cost of the process is negotiable depending on the number and size of participating hospitals per contract. It is also subject to the degree of customisation necessary to fulfil particular requirements. The cost always reflects the IHEA's wish to offer the product competitively.

## Contacts for AssetMark

The Consultant can be contacted by phone on (03) 5470 6916; or email at [michelle@wordsconsulting.com.au](mailto:michelle@wordsconsulting.com.au)

The AssetMark Coordinator is the Institute's representative in managing the system. The Coordinator can be contacted by email at [info@ihe.com.au](mailto:info@ihe.com.au)