

# Energy Use in Healthcare Services : Radiography Procedures

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## ABSTRACT

In 2010 the U.S. healthcare sector rose to comprise 18% of the GDP. Also another report shows \$8.8 billion was spent on energy to meet patient needs in 2008. As the percent of GDP spent on healthcare rises over the next several years, there will be an associated rise in energy consumed by healthcare services.

The majority of information on energy consumption and improvements in healthcare are at the macro level. Instead, this research explores energy use based upon the principles of life cycle analysis at the healthcare service level. The goal is to achieve a substantial increase in knowledge of healthcare services with the aim of improved sustainability.

## RESEARCH OBJECTIVES

- 1) To determine the complex direct and indirect energy implications of hospital services;
- 2) To understand how energy use for patients is tied to decision processes within the healthcare system

## HEALTHCARE ENERGY REPORTING

Energy studies in healthcare such as those reported by the Energy Information Administration (EIA) while revealing are often too broad in scope to be informative at a level of granularity of healthcare decision-making. The most recent healthcare building level analysis (EIA, 2002) breaks out energy use by heating and office equipment, however the information is based on 1999 data.

## HEALTHCARE COLLABORA

