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### Wireless sensor networks for healthcare: A survey

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#### Abstract

Becoming mature enough to be used for improving the quality of life, wireless sensor network technologies are considered as one of the key research areas in computer science and healthcare application industries. The pervasive healthcare systems provide rich contextual information and alerting mechanisms against odd conditions with continuous monitoring. This minimizes the need for caregivers and helps the chronically ill and elderly to survive an independent life, besides provides quality care for the babies and little children whose both parents have to work. Although having significant benefits, the area has still major challenges which are investigated in this paper. We provide several state of the art examples together with the design considerations like unobtrusiveness, scalability, energy efficiency, security and also provide a comprehensive analysis of the benefits and challenges of these systems.



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## Keywords

Wireless sensor networks; Pervasive healthcare; Care for elderly; Children and chronically ill

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