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## System Analysis and Design at Good Neighbor

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## **System Analysis and Design at Good Neighbor**

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The purpose of this capstone was to provide complete documentation for Good Neighbor House (GNH) system analysis, system design, and implementation plan. The main emphasis of system analysis is to understand the specific needs in order to develop two modules for dental and vision to the existing wright state HIEx system. The system analysis was following a traditional structural analysis method that mainly uses flowcharts and data flow diagrams to illustrate the new system. In addition, the capstone project suggests that system development should be done in an incremental approach; therefore, developing dental and vision modules independently and integrate it into the HIEX system. The detailed process analysis examined each process using a process diagram and looked for clues to inefficiency, redundancy, or opportunity for error. The system analysis recommends providing a customized HIEx system to GNH health center by developing dental and vision module that is integrated to the existing HIEx system. The GNH system analysis study was based on the six goals defined by the Institute of Medicine for healthcare quality improvement: safety, effectiveness, efficiency, timely, patient centered and equitable healthcare. The main risk assume are difficulty in calculating the ROI, long payback period, cost and issues during the implementation, and problems related to data management. The report also contains suggested guidelines for HIEx implementation which are needed to be approved by board of directors before implementation.