**Make a difference – help us revolutionize emergency care**

# Master Thesis: emergency hospital positioning and quality grading using data mining and statistical modelling

## Introduction

The team at Carefindy AB ([www.carefindy.com](http://www.carefindy.com)) is looking for one or two students to a master thesis project. There exists a lot of data of hospitals, both structured and unstructured, in various qualities and focusing on various areas. The master thesis project will explore how to combine these data, filter and adapt to the outcome and find a method that with high probability qualitatively grade emergency hospitals. The thesis is that some features, such as having a helipad or thoracic surgery ward, corresponds with being a high quality emergency hospital.

This project requires analytical skills and creativeness due to the variations in the input data. We need to find a person who is able to see the need for Carefindy and help us devise a method on how to extract the relevant information and produce a meaningful and useful output. This will require programming (input/output), statistics (qualify the output), innovative ideas (what to combine, where to search).

## Objectives

Build a prototype as a “proof of concept”.

* Find the relevant databases.
* Find a method to extract and combine the data from the different sources.
* Implement and document the method.
* Produce a meaningful output, i.e. qualitatively graded emergency hospitals as a list.
* The extraction of data must work as a continuous process and be able to handle new sources in the future.
* Document all development to ensure smooth handover to production environment.

The development environment will be based on Linux. The prototype development will require the whole chain of development that is: analysis, requirement definition, testing and prototype evaluation.

## Measurements

In addition to the prototype development some measurements and analysis are required to supplement as “proof of concept”.

## Location

The work will be conducted at Carefindy AB, Scheelevägen 27 in Lund (Ideon Gateway)

## Compensation

A regular fee for master thesis work within Carefindy AB will be paid.

## Time Start

Preferable Fall 2016 / Spring 2017 / Duration: 20 weeks

## Contact

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