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|  | Home health record requirement Specification. |
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| Date: | 04/03/2013 |

Home Health Record

Software Requirement Specification

**Authorizing Signatures:**

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## Revision History

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| --- | --- | --- | --- |
| **Revision** | **Editor** | **Date** | **Description** |
| 1 | Aashit Soni | 04/03/2013 | Initial Version |
| 2 | Aashit Soni | 04/20/2013 | Changes based on first review |

# Introduction

This document describes specific requirements for Home Health Record System. Home Health Record System as referred onwards as a software module is consist of My SQL based database system and computer program written in Visual C++ language. This software module provides a way to engage certified doctor to maintain their home health oversight records and billing in electronic format.

Following we will discuss about specific requirements and database design for the computer program.

# Database Design

This section discusses various database (records) kept electronically for the function of the home health records system. These databases are updated by the software module.

## Patient master information

Patient master information table keeps record about patient information. These informations can be added/updated by the user. The detail about patient’s geographical information and its whereabouts are kept intact in this table.

|  |  |
| --- | --- |
| Attributes | Description |
| #patient code | It is unique patient code generated by system |
| Name | Patient name |
| Street | Street address |
| Apt/unit | Apartment number if applicable |
| Town | Town |
| Zip code | Zip code |
| State |  |
| Home phone | Home phone |
| Mobile | Mobile |
| Country |  |
| Registration date | Date of registration |
| Last visit date | Date of patient lasts visit |

## Patient episode information

Patient episode information maintains patients active and completed episode details, only active episodes are eligible for billing. Every active episode has its relevant billing records and home health records.

Oversight billing and home health records can be multiple for the given episode record.

|  |  |
| --- | --- |
| Attributes | Description |
| #patient code | It is unique patient code generated by system |
| #episode code | It is unique episode number generated by system when episode creation happens |
| Start date | Episode start date |
| End date | Episode end date |
| Active | Is episode active |
| Last seen | Last visit to patient in the episode |
| Certification | Certification date |
| Recertification | Recertification date |
| Month\_minutes | Total month minutes adjusted with oversight billing record. Based on the criteria patient will be billed for the episode |

## Patient DX codes

Patient DX code keeps record information related to assigned dx codes for the patient and its corresponding episodes. DX codes are generally kept in the dx master record. If there are any changes to the DX code itself it shall be managed through the master. This table keeps record about the patient’s specific DX codes which are applicable to specific episodes.

|  |  |
| --- | --- |
| Attributes | Description |
| #patient code | It is unique patient code generated by system |
| #episode code | Unique episode code generated by system |
| #dx code | Unique dx code generated by system |

## Patient oversight record

Patient oversight record keeps information related HH records for the patient in given episode. The episode code which will be active are only eligible for the HH record.

The details about charts, medicine, studies and labs can be maintained here or may be it can be kept to specific tables. It is to be designed.

|  |  |
| --- | --- |
| Attributes | Description |
| #patient code | It is unique patient code generated by system |
| #episode code | Episode code |
| Date | Date of the oversight record |
| Charts reviewed | Details to follow |
| Medication reviewed | Details to follow |
| Studies reviewed | Details to follow |
| Need appointment | If yes, may be date shall be provided |
| Next appointment date | Date , if only applicable |
| Last appointment | Last date of appointment or visit |
| Lab record ordered | Details to follow |
| Instruction | It is like 300 chars to store |

## Patient oversight billing

Patient oversight billing is record keeping information for entries on oversight billing record. This table manages every minute that can be billed against the patient for the given episode. These records cumulative up to the episode total minutes. When the total minutes for any given patient reaches 30 minutes boundary for given episode it is eligible for billing.

|  |  |
| --- | --- |
| Attributes | Description |
| #patient code | Patient code |
| #episode code | Episode code |
| #cpo code | Cpo code. May be there is master for the cpo code |
| Date | Date of the oversight filling |
| Minutes | Number of minutes recorded for overall episode billing |

## CPO master

CPO master manages all the CPO code available in the system. This is master database and can be administered using the modules

|  |  |
| --- | --- |
| Attributes | Description |
| #CPO code | Unique code system generated |
| CPO name | CPO name – may be unique |
| CPO description | Description |

## DX master

DX master data for all the DX codes

|  |  |
| --- | --- |
| Attributes | Description |
| #dx code | DX code, system generate |
| DX name | Unique DX name |
| DX description | Description of the DX code |

# Software Design

This module describes software program that uses database to function based on user requirements. There are various modules that interacts with database for specifica customers scenario.

## Patient registration System

Patient registration modules handles patient registration information. It provides user to add new patient to the software system. It also allows various edit and modifications to the patient registration.

Patient registration system also provides range of reports which can be used for user to run its business smoothly. It will describe these reports in details after discussion with customers.

## Episode Creation

Episode creation and management is one of the fundamental activity or transactions that happens into the system to achieve the oversight billing and recording functionality. That is the main highlight of this project.

Once the episode is created, user can add various oversight records based on the actual occurring. These episode has its own life time, Which may be 3 monthly or 1 monthly. Once the episode is expired user can not add any more oversight records to it. It may or may not be valid for oversight billing. It can then only be viewed for the overall historical data.

## Oversight Billing

Oversight billing module is the main crux of the system. Here user provides details about the minutes accounted by the doctor on what date. It has information related specific CPO activity done.

Once the minutes administered on the episode crosses 30 minutes(may be configured) in specific episode time. The patient can be billed against the medicare. There are reports that can be produce end of day or end of week to figure out which are the patients that can be billed for their medicare in eligible episode.

## Oversight Health Record

Oversight health record provide additional details that might be for housekeeping for the doctor who are using the system. These details may include corrersponding details abou the oversight billing for the specific patient.

# Use Cases

|  |  |
| --- | --- |
| **USE CASE ID** | US-01 |
| **USE CASE NAME** | New patient registration |
| **GOAL** | When a new patient is added into the system |
| **PRE CONDITION** | -none- |
| **POST CONDITION** | -none- |
| **ACTORS** | Clinical staff |
| **REQUIREMENTS** | Patient details |
| **MAIN SUCCESS SCENARIO** |  |
|  |
|  |
| **EXCEPTIONS** |  |
| **ASSUMPTIONS** |  |
| **OPEN ISSUES** |  |

|  |  |
| --- | --- |
| **USE CASE ID** | US-02 |
| **USE CASE NAME** | Episode creation |
| **GOAL** | When new episode is required for the patient |
| **PRE CONDITION** | Patient should be registered |
| **POST CONDITION** | -none- |
| **ACTORS** | Clinical staff |
| **REQUIREMENTS** | Time line, month, dx codes |
| **MAIN SUCCESS SCENARIO** |  |
|  |
|  |
| **EXCEPTIONS** |  |
| **ASSUMPTIONS** |  |
| **OPEN ISSUES** |  |

|  |  |
| --- | --- |
| **USE CASE ID** | US-03 |
| **USE CASE NAME** | Oversight billing |
| **GOAL** | When a time is spend on patient by doctor |
| **PRE CONDITION** | episode should be active |
| **POST CONDITION** | Minutes to be accounted for the total medicare |
| **ACTORS** | Clinical staff |
| **REQUIREMENTS** | Date,minutes and CPO code |
| **MAIN SUCCESS SCENARIO** |  |
|  |
|  |
| **EXCEPTIONS** |  |
| **ASSUMPTIONS** |  |
| **OPEN ISSUES** |  |

# Additional Information

# Appendix