**The Wellmeadows Hospital**

This case study describes a small hospital called Wellmeadows, which is located in Edinburgh. The Wellmeadows Hospital specializes in the provision of health care for elderly people. Listed below is a description of the data recorded, maintained, and accessed by the hospital staff to support the management and day-to-day operations of the Wellmeadows Hospital.

**Data Requirements**

**Wards**

The Wellmeadows Hospital has 17 wards with a total of 240 beds available for short-stay and long-stay patients, and an outpatient clinic. Each ward is uniquely identified by a number(for example, ward 11) and also a ward name (for example, Orthopedic), location (for example, E Block), total number of beds, and telephone extension number (for example, Extn 7711).

**Staff**

The Wellmeadows Hospital has a Medical Director, who has overall responsibility for the management of the hospital. The Medical Director maintains control over the use of the hospital resources (including staff, beds, and supplies) in the provision of cost-effective treatment for all patients

The Wellmeadows Hospital has a Personnel Officer who is responsible for ensuring that the appropriate number and type of staff are allocated to each ward and the out-patient clinic. The information stored on each member of staff includes a staff number, name (first and last), full address, telephone number, date of birth, sex, National Insurance number(NIN), position held, current salary, and salary scale. It also includes each member’s qualifications (which includes date of qualification, type, and name of institution), and work experience details (which includes the name of the organization, position, and start and finish dates).

The type of employment contract for each member of staff is also recorded, including the number of hours worked per week, whether the member of staff is on a permanent or temporary contract, and the type of salary payment (weekly/monthly). An example of a Wellmeadows Hospital form used to record the details of a member of staff called Moira Samuel working in ward 11 is shown in Figure B.1.

Each ward and the outpatient clinic has a member of staff with the position of Charge Nurse. The Charge Nurse is responsible for overseeing the day-to-day operation of the ward/clinic. The Charge Nurse is allocated a budget to run the ward and must ensure that all resources (staff, beds, and supplies) are used effectively in the care of patients. The Medical Director works closely with the Charge Nurses to ensure the efficient running of the hospital.

A Charge Nurse is responsible for setting up a weekly staff Rota, and must ensure that the ward/clinic has the correct number and type of staff on duty at any time during the day or night. In a given week, each member of staff is assigned to work an early, late, or night shift.

As well as the Charge Nurse, each ward is allocated senior and junior nurses, doctors and auxiliaries. Specialist staff (for example, consultants, physiotherapists) are allocated to several wards or the clinic. An example of a Wellmeadows Hospital report listing the details of the staff allocated to ward 11 is shown in Figure B.2.

**Patients**

When a patient is first referred to the hospital he or she is allocated a unique patient number. At this time, additional details of the patient are also recorded including the name(first and last name), address, telephone number, date of birth, sex, marital status, date registered with the hospital, and the details of the patient’s next-of-kin

**Patient’s next-of-kin**

The details of a patient’s next-of-kin are recorded, which includes the next-of-kin’s full name, relationship to the patient, address, and telephone number.

**Local doctors**

Patients are normally referred to the hospital by their local doctor. The details of local doctors are held, including their full name, clinic number, address, and telephone number. The clinic number is unique throughout the United Kingdom. An example of a Wellmeadows Hospital patient registration form used to record the details of a patient called Anne Phelps is shown in Figure B.3

**Patient appointments**

When a patient is referred by his or her doctor to attend the Wellmeadows Hospital, the patient is given an appointment for an examination by a hospital consultant. Each B.3 The Wellmeadows Hospital Case Study1263 appointment is given a unique appointment number. The details of each patient’s appointment are recorded and include the name and staff number of the consultant under-taking the examination, the date and time of the appointment, and the examination room(for example, Room E252).

As a result of the examination, the patient is either recommended to attend the out-patient clinic or is placed on a waiting list until a bed can be found in an appropriate ward.

**Outpatients**

The details of out-patients are stored and include the patient number, name (first and last name), address, telephone number, date of birth, sex, and the date and time of the appointment at the outpatient clinic.

**In-patients**

The Charge Nurse and other senior medical staff are responsible for the allocation of beds to patients on the waiting list. The details of patients currently placed in a ward and those on the waiting list for a place on a ward are recorded. This includes the patient number, name (first and last name), address, telephone number, date of birth, sex, marital status, the details of the patient’s next-of-kin, the date placed on the waiting list, the ward required, expected duration of stay (in days), date placed in the ward, date expected to leave the ward, and the actual date the patient left the ward, when known.

When a patient enters the ward, he or she is allocated a bed with a unique bed number. An example of a Wellmeadows Hospital report listing the details of patients allocated toward 11 is shown in Figure B.4.

**Patient medication**

When a patient is prescribed medication, the details are recorded. This includes the patient’s name and number, drug number and name, units per day, method of administration (for example, oral, intravenous (IV)), start and finish date. The medication (pharmaceutical supplies) given to each patient is monitored. An example of a Wellmeadows Hospital report used to record the details of medication given to a patient called Robert MacDonald is shown in Figure B.5.

**Surgical and non-surgical supplies**

The Wellmeadows Hospital maintains a central stock of surgical (for example, syringes, sterile dressings) and non-surgical (for example, plastic bags, aprons) supplies. The details of surgical and non-surgical supplies include the item number and name, item description, quantity in stock, reorder level, and cost per unit. The item number uniquely identifies each type of surgical or non-surgical supply. The supplies used by each ward are monitored.

**Pharmaceutical supplies**

The hospital also maintains a stock of pharmaceutical supplies (for example, antibiotics, painkillers). The details of pharmaceutical supplies include drug number and name, description, dosage, method of administration, quantity in stock, reorder level, and cost per unit. The drug number uniquely identifies each type of pharmaceutical supply. The pharmaceutical supplies used by each ward are monitored.

**Ward requisitions**

When required, the Charge Nurse may obtain surgical, non-surgical, and pharmaceutical supplies from the central stock of supplies held by the hospital. This is achieved by ordering supplies for the ward using a requisition form. The information detailed on a requisition form includes a unique requisition number, the name of the member of staff placing the requisition, and the number and name of the ward. Also included is the item or drug number, name, description, dosage and method of administration (for drugs only), cost per unit, quantity required, and date ordered. When the requisitioned supplies are delivered to the ward, the form must be signed and dated by the Charge Nurse who initiated the order. An example of a Wellmeadows Hospital requisition form used to order supplies of morphine for ward 11 is shown in Figure B.6.

**Suppliers**

The details of the suppliers of the surgical, non-surgical, and pharmaceutical items are stored. This information includes the supplier’s name and number, address, telephone, and fax numbers. The supplier number is unique to each supplier.

Transaction Requirements

The following transactions are undertaken to ensure that the appropriate information is available to enable the staff to manage and oversee the day-to-day running of the Wellmeadows Hospital. Each transaction is associated with a specific function within the hospital. These functions are the responsibility of members of staff with particular job titles (positions). The main user or group of users of each transaction is given in brackets at the end of the description of each transaction.

1. Create and maintain records recording the details of members of staff (PersonnelOfficer).
2. Search for staff who have particular qualifications or previous work experience(Personnel Officer).
3. Produce a report listing the details of staff allocated to each ward (Personnel Officer and Charge Nurse)
4. Create and maintain records recording the details of patients referred to the hospital (all staff ).
5. Create and maintain records recording the details of patients referred to the out-patient clinic (Charge Nurse).
6. Produce a report listing the details of patients referred to the out-patient clinic (Charge Nurse and Medical Director).
7. Create and maintain records recording the details of patients referred to a particular ward (Charge Nurse).
8. Produce a report listing the details of patients currently located in a particular ward (Charge Nurse and Medical Director).
9. Produce a report listing the details of patients currently on the waiting list for a particular ward (Charge Nurse and Medical Director).
10. Create and maintain records recording the details of medication given to a particular patient (Charge Nurse).
11. Produce a report listing the details of medication for a particular patient (Charge Nurse).
12. Create and maintain records recording the details of suppliers for the hospital (Medical Director).
13. Create and maintain records detailing requisitions for supplies for particular wards (Charge Nurse).
14. Produce a report listing the details of supplies provided to specific wards (Charge Nurse and Medical Director).