ADDIS ABABA UNIVERSITY

COLLEGE OF HEALTH SCIENCES

SCHOOL OF PUBLIC HEALTH

REDUCING MEDICAL RECORD CHART LOSS IN GODEY GENERAL HOSPITAL SOMALI REGION, ETHIOPIA

BY ABDIRAHMAN IBRAHIM RABAH

ADVISORS

DEMEKE ASSEFA (MD MPH)

BIRHAN TASEW (BSC MPH)

Capstone project submitted to Addis Ababa university school of public health for partial fulfillment of master's degree of hospital and health care Administration.

Declaration

I, the undersigned, the MHA student declare that this capstone project is my original work and Has not been presented for a degree in this or other University and all sources of materials have Been fully acknowledged.

Name: Abdirahman Ibrahim Rabah

Signature: _____

Place: Addis Ababa

Date of submission: _____

This capstone project work has been submitted for examination with our approval as University advisor.

Advisor's name	Signature	Date
Birhan Tasew (BSC MPH)_____	_____	
Demeke Assefa (MD MPH) ----------	----------	

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I would like to express my gratitude to Godey hospital senior management team led by CEO of the hospital for their full cooperation and support

Acronyms

AAU =Addis Ababa University

AHIMA= American Health Information Management Association

ART= antiretroviral therapy

EMR =electronic medical records

E.C=Ethiopian calendar

FMOH=federal ministry of health

G.C= Gregorian calendar

HSTP =health sector transformation strategic plan

MRU= Medical record unit

MRN=medical record number

MPI=master patient index

OPD= outpatient department

PHR= personal health records

SMT= senior management team

USA=United States of America

% =percentage

Abstract

Introduction: medical record chart are used to describe the systematic documentation of a single patient's medical history and care across time, within one particular health care provider's jurisdiction. [3]

Background: Godey general hospital has many problems,among those, medical record chart loss is the one that needs attention by senior management, because the loss was high (32 %).

Objective to reduce the rate of medical record chart loss in Godey general hospital from 32% to 0% in June 2018.

Methods: Pre post interventional study was conducted to measure the rate of medical record chart lost in Godey general hospital, Somali region. The source population was Godey hospital and the target population was all charts in the record unit of the hospital. It has been used sample of 50 medical record charts from the whole chart unit by simple random sampling.

Data collection checklist was used to assure the presence or absence of the medical record chart.

Finding: decreased medical record chart loss from before the intervention to after the intervention (32% pre intervention and 6% post intervention).

Keywords: Medical record chart loss, Somali region, Godey hospital, based pre post interventional study**.**

Project budget: 18000 EB.

Contents

1. Introduction

The terms medical record, health record, and medical chart are used somewhat interchangeably to describe the systematic documentation of a single patient's medical history and care across time within one particular health care provider's jurisdiction [3]

The medical record includes a variety of types of "notes" entered over time by health care professionals, recording observations and administration of drugs and therapies, orders for the administration of drugs and therapies, test results, x-rays, reports, etc. The maintenance of complete and accurate medical records is a requirement of health care providers and is generally enforced as a licensing or certification prerequisite. [6]

The terms are used for both the physical folder that exists for each individual patient and for the body of information found therein. [1]

Medical records have traditionally been compiled and maintained by health care providers, but advances in online data storage have led to the development of personal health records (PHR) that are maintained by patients themselves, often on third-party websites This concept is supported by united states of America (USA), national health administration entities and by the American Health Information Management Association(AHIMA). [2]

The information contained in the medical record, allows health care providers to determine the Patient's medical history and provide informed care. The medical record serves as the central repository for planning patient care and documenting communication among patient and health care provider and professionals contributing to the patient's care. [5]

An increasing purpose of the medical record is to ensure documentation of compliance with institutional, professional or governmental regulation. [10]

Traditionally, medical records were written on paper and maintained in folders often divided into sections for each type of note (progress note, order, test results), with new information added to each section chronologically. Active records are usually housed at the clinical site, but older records are often archived offsite. [12]

The advent of electronic medical records (EMR)has not only changed the format of medical records but has increased accessibility of files. The use of an individual dossier style

medicalrecord, where records are kept on each patient by name and illness type originated at the Mayo Clinic out of a desire to simplify patient tracking and to allow for medical research. [1] Maintenance of medical records requires security measures to prevent from unauthorized access or tampering with the records [2].

2. Organizational description

Godey Hospital, is located at Godey city the second city of Somali region and has total population of 579,782 the hospital has been established at the end of 1952 E.C the hospital is under regional health bureau and serves as referral canter for all Shebelle zone and some part of Afder zone centres

This hospital consists of the following services Medical, Surgical, Gynecology& Obstetrics, laboratory, pharmacy, radiology, Emergency department, etc. Total number of beds is 194

The annual budget for the calendar year 2017/18 G.C is 26,069,216. 86 ETB birr

The number of staff that work in the hospital is 342, among them 200 are health professionals and 142 are supportive staffs. The hospital is staffed by 03 specialists,13General practitioner,90 Nurses, 37 Midwife, 5 radiographers, 15 laboratory technician and technologists,13 druggist and pharmacist, 6 public health officers and 3 anesthesia.

2.1 Mission and Vision

Mission: To reduce morbidity, mortality, disability and improve the health status of the population in Shebelle zone, through providing and regulation of comprehensive package of primitive, preventive, basic curative and rehabilitative health services via decentralized and democratized health system in collaboration with stake holders.

Vision: To be one of the leading hospitals in Ethiopia. To see healthy, productive and prosperous community of the Somali regional state.

3. Problem statement

Godey general hospital has many problemsamong those, medical record chart loss is the one that needs attention by senior management, because the loss was high (32 %) This figure shows that 16 out of 50 patient's medical record charts are lost. According to the Federal Ministry of Health recommendation, the medical record chart loss should be zero.

Due to patient medical record chart loss and absence of tracer log book, many patients are in difficulty of multiple diagnosis and stay unnecessarily for more days waiting charts to be found in addition to unnecessary expense for patients such loss of cards is also creating very crowded patient flow, hindering the services of outpatient department (OPD), as well as the services of Laboratory and radiology units. So, they are forced to have to undergo the same diagnosis twice.

4. Capstone project objective

General objectives

To reduce the rate of medical record chart loss in Godey general hospital to 0% in June 2018.

Specific objectives

To reduce medical record chart loss of Godey general hospital from 32 % to 0 % in june2018.

To improve tracer card format logbook of the medical record unit from 0% to 100% in June 2018.

5. Root cause analysis

Main causes identified are

1. Shortage of shelves
2. Not enough staff
3. Not enough room
4. Not using tracer card format logbook
5. No Professional mix of the staffs of medical record unit
6. No recognition or award for good work

5.1 Verification

1. shortage of shelves: There are thee shelves alone in one medical record unit room in which each shelf is one and half meter square, which makes occupied and staff of the unit simply puts the charts in the room without ordering by medical record number, the day patient come to find service, makes unavailable and the only option is to get new card and new diagnosis but it's not the exact cause.

2. Not enough staff: There are three staffs in the medical record unit two male and one female in which one of them is contract staff every day one of them is off for the night duty shift so the basic functions of the unit like Patient registration, authorization of free and credit services, development and maintenance of the master patient index, retrieving and filing medical records, delivering files to various locations of the hospital, recording chart location, collection of medical records from individual service units, Handling of medico-legal issues relating to releasing patient information and other legal issues is covered only the rest two staff

Hospital has no runners, who takes charts from the record unit to other departments, so that patients are given on their hands to find service from outpatient department.

Generally shortage of the staff is one of the leading causes for the chart loss but it's not the exact root cause.

3. Not enough room: Godey general hospital has only one room for the medical record unit, which is thee meter square and is stored more than five thousand cards. No separate record numbers and/or filing systems exist in the hospital, so the new cards are on the ground without shelves but it's not the real root cause for the chart loss.

4. Not using tracer card format logbook: On a daily basis, assigned medical record staff should refer to the logbook and ensure that all medical records are returned to the card room. The only exception is for admitted inpatients whose treatment is ongoing.

This can help track where records are outside the Medical Records Room but in our hospital this form are not applying totally they simply wait until the departments bring back to the unit, which makes some units have charts on their unit more than months

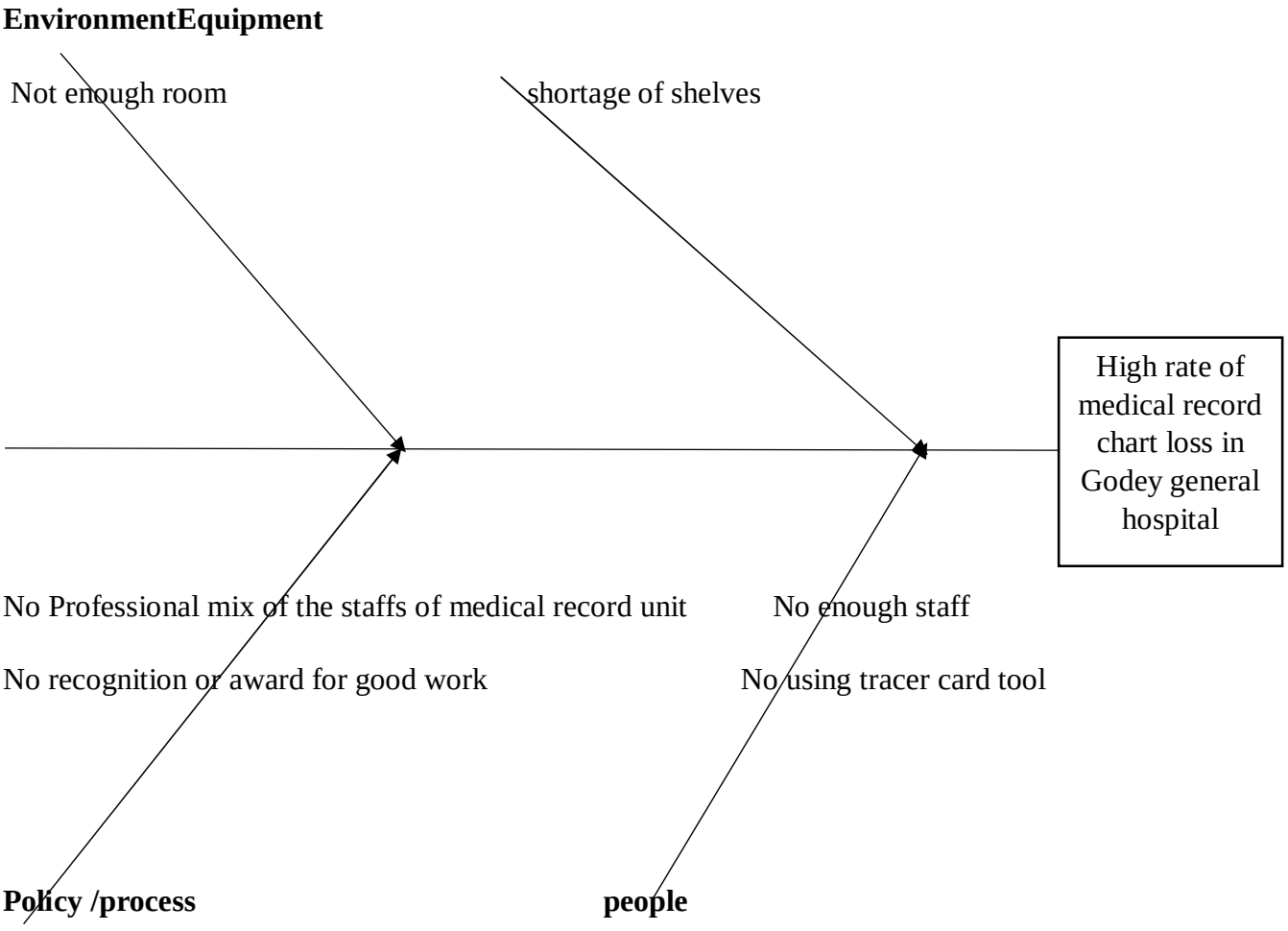
5. No Professional mix of the staffs of medical record unit: Staffs in the record were claiming the chart loss is due to in sufficiency of technical staffs, which have knowledge for this function.

The unit has three staff, two of them is certificate and the other is diploma in management.

6. No recognition or award for good work:no annual training on all departments and motivation for the staff which performs extra work but it's not the exact root

Identification of real cause: The exact root cause is not applying tracer card format logbook.

5.2 Fish bone diagram



6. Literature review

Medical records management (MRs) is one of the components of health information system that documents information related to patient generated during patient-to-health care provider encounters at a health care facility. A well-managed medical records system is critical to improve the provision of quality health care services to ensure safe medical practice, efficient and effective services and improve the patient's experience and satisfaction with their medical encounter. A strong medical records system is also equally important to make clinical and public health evidence based practices as well as making informed decisions. [3]

Medical records may serve as a reliable source of information for medico-legal issues and medical/ public health researchers.

A well-organized medical recording system ensures the availability of reliable healthcare data in the health system; in which it can serve as an input for the implementation of national health sector transformation strategic plan (HSTP) in particular to the information revolution agenda. [1]

Poor data quality management system including incomplete medical recording and reporting practices, lack of information technology and its use, shortage of human resource and professional mix, failure to audit medical records and failure to adhere with existing guidelines and standard of operating procedures are the major observed challenges in hospital's medical record management system. [4]

Electronic medical record (EMR) which is under Medical Record Unit (MRU) is the component of Electronic Health Record System/ Smart care that computerizes the MRU/card rooms. The MRU–EMR module has been deployed up to now in 45 hospitals and 59 health centers. In Ethiopian fiscal year (EFY) 2007, the FMOH is planning to implement full EMR in ten hospitals in Addis Ababa as a flagship initiative.

Operational Standards for Medical Records Management

1. Unique medical record number is assigned to a patient during his/her first visit of care.
2. The hospital shall have a single unified medical registration unit for all patients' registration.
3. The hospital utilizes paper and computer-based systems to register and retrieve medical records.
4. The hospital avails and utilizes a standard set of formats that comprise a complete medical record for continuum of patient's care.

5. The hospital shall implement and comply with national guidelines to manage access to patient's medical records.
6. The hospital performs medical records auditing, data quality checks, archiving/culling procedures and takes corrective actions on a regular basis.
7. The hospital ensures patient's medical records return from different service units to medical records unit at the end of each service day in accordance with medical record tracing system.
8. The hospital shall automate health information system through implementation of integrated electronic medical record system. [3]

Storage of Medical Records

All active MRs should be filed in a single, centralized file room, i.e., the Medical Records Department or Card Room. MRs should be filed numerically according to MRN. If more than one room is needed for file storage, files should be stored numerically (i.e. MRN 1,000-5,000 in one room 1; MRN 5,001 – 10,000 in room 2). Hospitals should audit the files periodically (quarterly or as per hospital policy) to ensure correct filing. All patient files should be stored together, using one MPI, including those from specialized clinics (E g. ART, EPI etc.). If separate record numbers and/or filing systems exist the hospital should integrate these within a single system. [2]

Handling of Medical Records

A comprehensive MR management system encompasses the handling the MR from time of patient registration, during active care delivery, through patient discharge, and ongoing filing/storage of the MR, until removal/destruction of old MRs from storage. The flow of MRs/charts is important to ensure a balance between availability of clinical information and patient confidentiality. A well-designed system minimizes the loss of Medical records. [2]

Access to Medical Records from the Hospital

MRs should be accessed from the facility only upon an order from the appropriate jurisdiction bodies. The hospital should establish its own policy regarding MR removal from the premises, and this policy should comply with federal and regional health policies. [3]

If a patient seeks health care from another hospital and has consented to the release of his/her clinical information to the new hospital, only a photocopy should be given to the requesting hospital. The original medical record should never be transferred out of the hospital. [1]

7. Methodology

7.1 Setting: This capstone was conducted at Godey general hospital in Somali region which is one of nine hospitals in Somali Region.

Godey hospital was established in 1952E.C By Emperor Hailesellasie and currently serving as a Referral hospital for all Godey zone, some part of afder zone.

The hospital has Catchment Population of 579,782, Located in Godey town, which is far away from Addis Ababa 1116 km.

The hospital.Has bed capacity of 194 beds and Staff Number of 360 while 200 of them are health Professionals.

Total patients seen at annually is 36,000.

7.2 Project design: A pre post interventional study was conducted to measure the rate of medical record chart lost in Godey General hospital.

7.3 Source population all record unit of the hospital.

7.4 Target population chart all record unit of the hospital.

7.5 Sample size: We randomly sample 50 medical record numbers (MRN) from the master patient index (MPI) and check to see if the medical record (MR) is in the medical records room. A MR is considered lost if it is not found in the card room and there is no tracer card indicating where the medical record can be found.

Calculate the total number of cards not found =cards not found from the total fifty cards divided by fifty times hundred =percentage of chart loss.

In short =not found/50)*100.

7.6 Sampling procedure: Randomly sample 50 MRNs from the MPI and check to see if the medical record (MR) is in the medical records room.

7.7 Data collection procedures and instruments: Data collection form tools was used at baseline and at the end of the study to compare pre intervention and post intervention results of medical record chart loss.

7.8 Data analysis: in order to know whether there is difference between the pre and post intervention number of medical record charts lost the raw data was recorded using data collection form tools and then was calculated to know the percentage difference of lost cards.

7.9 Operational definition: medical record chart lost: Medical record chart is said to be lost when it is not found in the card room during checking time and there is no tracer card indicating where the medical record can be found, when the card is not returned back to the card room within 24 hours after patient discharge.

7.1.1 Data quality management: the data collectors were given training for two hours about the checklist and close supervision was done.

7.1.2 Ethical consideration: The proposal was reviewed and approved by Addis Ababa University, School of Public Health, and Ethical Review Committee, then official letter was obtained from the University which was submitted to Godey hospital and all medical record unit staff has been notified about the purpose of the study.

7.1.3 Plan for dissemination of results: The final result after submitting to Addis Ababa University was be submitted to Godey hospital and Somali regional health bureau.

8. Intervention: This is the step to list all the possible strategies you might pursue to solve the problem.

Each strategy often includes more than one activity.

From the root cause together with the senior management we have developed thee interventions.

1. Training on applying tracer card format logbook
2. Redesigning of the medical record unit
3. Provision of incentives for the staff for quality work.

8.1 Set criteria for decision matrix

Table 8.1 Evaluation criteria (5- most ideal; 1 – least ideal**)**

No	Strategic alternatives	Impact	Expense	Political feasibility	Time	Total
1	Training on applying tracer card format logbook	**5**	**4**	**4**	**4**	**17**
2	Redesigning of the medical record unit	**5**	**3**	**3**	**3**	**14**
3	Provision of incentives for the staff for quality work	**3**	**5**	**2**	**2**	**12**

8.2 Selected intervention/ Strategy: Training on applying tracer card tool in which assigned medical record staff should refer to the logbook and ensure that all medical records are returned to the card room is the best selected strategy.

8.3 Develop implementation plan and implement.

Implementation: we created detailed list of tasks/activities on Provision of Training on tracer card tool in which assigned staff should refer to the logbook and ensure that all record charts are returned to the card room is the best selected strategy.

Table 8.4 Gantt chart format (implementation plan of the selected intervention)

Tasks	People responsible	Time line sequence			
		Wk. 1	wk2	wk3	wk4
Hospital awareness and approval	Abdirahman				
Documents and materials procurement	Abdirahman ,senior management team of the hospital				
Draft letter from the CEO to the staffs	Human resource unit of the hospital				
Implement training	Abdirahman				
Follow up and evaluation	Senior management team				

8.5 Evaluation plan and evaluate

Evaluation plan

To check post intervention status we will collect 50 medical record charts and see the difference from the pre intervention

Evaluate

It was checked total of 50 medical record charts in which 47(forty seven) of them were found and 3 (three) of them were lost and it was confirmed that the unfound charts was taken to home by some patients. Which makes 6% of charts are lost and 94% of them are found and that is great achievement.

9. Results of pre/post intervention

A total of 50 medical record charts were included in this capstone project as shown in table 9.1.

Table 9.1 Pre intervention and post intervention changes of medical record chart loss in Godey general hospital.

Indicator	**Pre intervention**	**Post intervention**
Medical record chart lost	**16(32%)**	**3(6 %)**
Applying tracer card format logbook	**0%**	**100 %**

It was confirmed that three cards were taken by patients to their homes after finding thirteen from the total lost cards.

Table.9.2 the distribution of patient medical record chart found by department.

S.N	Department	Medical record chart found	
		Pre intervention	Post intervention
1	Surgical ward	-----	2
2	Medical ward	-----	4
3	Eye unit	-----	3
4	Obstetrics & gynecology department	-----	4
Total		-----	13

10 Discussion

A total of 50 medical record charts were included in this capstone project, in which 16 of the medical record charts were lost (not found) and 34 of the medical record charts were Found in the pre intervention which makes 32 % of the checked were lost and after knowing the main cause for the chart loss which is not applying tracer card format logbook and selected the best intervention which is Training on tracer card format logbook in three days training for all record unit in order to help assigned medical record staff refer to the logbook and ensure that all records are returned to the card room.

There were campaign of searching lost charts from all the clinical departments and it was found 13 charts from the total 16 charts which decreased the chart loss from 32% to 6%, while it was confirmed that the unfound chats was taken to home by their patients.

It was done a survey of checking medical record implementation activities, which measures whether the main outlined recommendations outlined in Ethiopian hospital transformation guideline (EHSTG) have been implemented in Godey general hospital and it was found the total unmet percentage from standard 33% and 67% from met, as shown in Annex-B: Checklist to record implementation activities.

11. Conclusion and recommendation

Conclusion

The findings of this capstone project suggest a number of implication that a simple set of intervention could be accomplished to significantly improve the accessibility and decreasing medical record chart loss and bring client satisfaction that shows effectively applying tracer card format logbook can improve medical records system management

The likelihood of decreasing medical record chart loss from before the intervention to after intervention (32% pre intervention and 6% post intervention).

Recommendation

Full implementation of tracer card format logbook and proper management should be strengthened and the full support from hospital's senior management.

It was recommended that Intensive and continuous training should be given for the record unit staff by regional health bureau.

It was recommended to federal ministry of health (FMOH) to implement electronic medical record configuration system in the hospital.

12. Strength and limitation

Strength

The intervention and methodology taken was helpful for the achievement of the results

Involvement and commitment of senior management of the hospital

Limitations

Shortage of time

Financial limitation

Computer shortage

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Appendices

Annex-A: Tools to check chart loss in pre intervention status

S/NO	Medical record number	pre intervention	Post intervention
1.	134152		
2.	134190		
3.	134252		
4.	134278		
5.	134309		
6.	134391		
7.	134402		
8.	134478		
9.	134776		
10.	134928		
11.	135006		
12.	135111		
13.	135164		
14.	135198		
15.	135247		
16.	135287		
17.	135386		
18.	135514		
19.	135535		
20.	135652		
21.	135763		
22.	135854		
23.	135900		
24.	135985		

25.	136082		
26.	136117		
27.	136232		
28.	136452		
29.	136675		
30.	136677		
31.	136806		
32.	136843		
33.	136958		
34.	137016		
35.	137041		
36.	137119		
37.	137281		
38.	137325		
39.	137435		
40.	137512		
41.	137550		
42.	137678		
43.	137820		
44.	137950		
45.	138049		
46.	138203		
47.	138347		
48.	138426		
49.	138579		
50.	138733		

Annex-B: **Checklist to record implementation activities.**

S. No	Elements of Checklists	Yes	No
1.	Unique medical record number assigned to a patient during his/ her first visit of care.		
2.	The hospital shall have a single unified medical registration unit for all patients' registration.		
3.	The hospital utilizes paper and computer-based systems to register and retrieve medical records.		
4.	The hospital avails and utilizes a standard set of formats that comprise a complete medical record for continuum of patient's care.		
5.	The hospital shall implement and comply with national guidelines to manage access to patient's medical records.		
6.	The Hospital's MRU head ensures allocation and availability of all necessary resources to manage medical recording activities.		
7.	Hospital performs medical record auditing, data quality checks, archiving/culling procedures and takes corrective actions on a regular basis.		
8.	Hospital ensures patient's medical records return from different service units to MRU at the end of each service day in accordance with medical record tracing system.		
Total			
Percentage			

Annex c: Tool to check Tracer Card

Tracer card

Facility Name: GODEY GENERAL HOSPITAL

MRN #: ###############

Patient's Name: _____XX_____

#	Department/Person MR is sent to	Receiver's Signature	Date
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			