

FACULTY OF HEALTH SCIENCE

HS 240

GROUP NHSNF8Y

ENT 600

TECHNOLOGY ENTREPRENEURSHIP

LECTURER:

PUAN ZANARIAH BINTI ZAINAL ABIDIN

No.	STUDENTS NAME	ID NO
1	SHARIFAH NOR FOO BT MUHAMMAD	2014884052
	FOO	
2	NORAFZAN BT MOHD ALI	2014654682
3	NOR AZNIL ZAHIRAH BT MOHD ARIFFIN	2014689134
4	SITI HUMAIRAH BT KAMAL HAMADI	2014271072
5	WAN NURUL ASHIKIN BT WAN MOHD	2014657032
	KHUDZAIFAH	
6	NURUL SUHAIDA BT AHMAD ZAWAWI	2014219022

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Pro Dilution

1.0 PRODUCT DESCRIPTION

1.1 INTRODUCTION

Is a rechargeable battery operated with drug, saline, and auto-pulled syrings compartments to automatically calculate and withdraw medication as ordered by doctor.

1.2 Background

One of the error that may happen in the medical field is during dilution of medication. There are many different types of medication which are highly concentrated and also cytotoxic needs to be diluted .The process of dilution require manual technique using the conventional syringe. Therefore, the technology used for the drug dilutor machine which are HiBaSed from B. Braun Space Perfusor and Infusomat pumps will ensure accurate dilution of medication ,r educe time and spillage in preparing medication. Besides that, drug name up to 24 characters is available in this programme.

1.3 PURPOSE OF DEVELOPMENT

- Prevent errors during dilution process
- Prevent medication errors
- Minimize workload
- · Reduce injury or needle prick among nurses
- Prevent drug spillage
- Time saving

1.4 PRODUCT CONCEPT

 For assisting medical staffs especially in preparing medication and avoid medication errors

1.4.1 APPLICATION

Basically in hospital setting which requires medication dilution especially in the ward or pharmacy

1.4.2 FUNCTIONS

- Auto pulled syringe's compartment able to fix 10cc, 20cc and 50cc syringe and automatically withdraw drug's solution
- · Compartment of saline and drug- able to place and dilute drug and saline
- LED touch screen with soft keys— able to visualize amount/volume of solution and to set calculation for drug dilution
- Accessories :
 - -Battery
 - -Plug and cable
 - -Smart infusion tubing

1.5 UNIQUE FEATURES

The uniqueness of the product for availability for the product in Malaysia market consist of :

- -LED touch screen to set calculation of amount and volume for drug dilution
- -Smart compartment for placement and dilution of saline and drug with smart infusion tubing
- -Auto-pulled syringe's compartment to automatically withdraw dilute medication

1.5.1 Pictures Description

Front view



