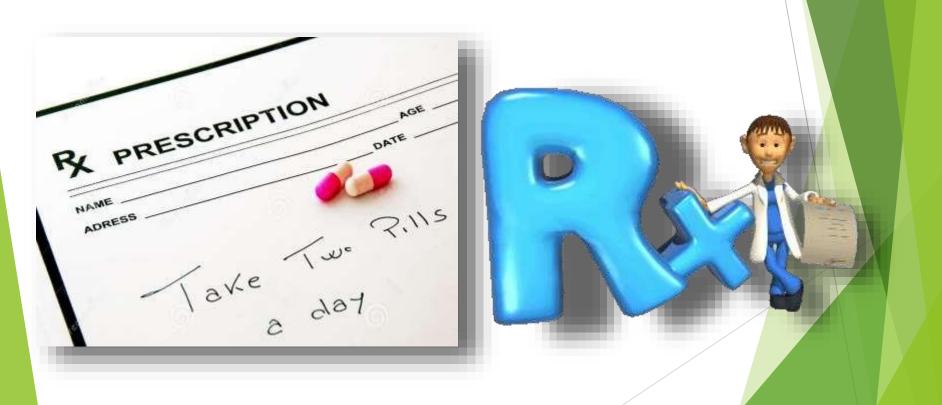
Prescription



(Pharmaceutics II)
Unit 1

DEFINITION

A prescription is a written order (handwritten or electronic) by a registered physician directing the pharmacist to prepare or dispense pharmacological agents/medications for the diagnosis, prevention or treatment of a disease.



Types of Prescription

There are mainly two types of prescription:

1) Pre compounding prescription:

Prescription for already prepared drug (by pharmaceutical companies) e.g. Cap. Ciprofloxacin (500 mg) etc.

2) Extemporaneous prescription:

The pharmacists prepare the medication according to the drugs and dosages directed by the physician.



Difference between Pre-compounding and Extemporaneous Prescription

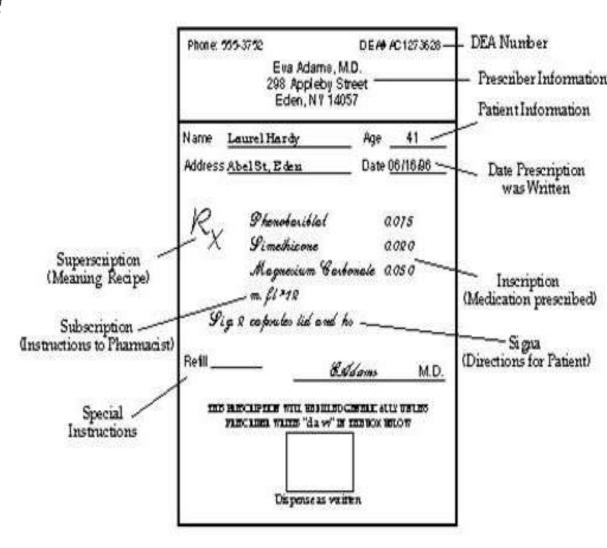
Types of Prescription

Pre-compounding prescription	Extemporaneous (Impromptu) prescription
It is the prescription that contain drugs available in pre- compounded form and is dispensed as it is.	A working definition of extemporaneous dispensing or compounding is the mixing together of the ingredients of a prescription or drug formula and generally refers to a manual process performed for individual orders by a dispenser or pharmacist.
Pharmacists or Nursing Staff dispense the drugs as directed by the physician	Pharmacists or Nursing Staff prepare the medication according to the drugs and dosages as directed by the physician
More common these days	Seen in limited scenario, e.g. Ayurvedic prescriptions, ICU prescriptions
Comparatively safer as the dosage forms are not modified.	Higher risk: The 'peppermint water case' of UK: wrong strength of chloroform water leading to the death of a child

PARTS OF PRESCRIPTION

- An ideal prescription should have the following parts:
- Date
- Superscription
- Inscription
- Subscription
- ▶ Transcription
- Signature

The prescription's four main parts:



▶ Date:

- -To know when the medicines were last dispensed
- -To prevent the misuse of the drug by the patients

►Superscription:

- Information about the prescriber (name, address and telephone number)
- Information about the patient (full name, address, gender, DOB, weight & height if necessary)
- Rx symbol
 - -It is an abbreviation of Latin term "Recipe", meaning "to take" or "take thou"

Inscription:

- -Main part of the prescription.
- -It gives the information about the name of the drug (generic or trade name), its formulation and unit dosage.

Subscription:

-Subscription provides information to the pharmacists about the quantity and dosage form of the drug to be dispensed.

► <u>Transcription:</u>

-Transcription is the *prescribers direction* to the patient contains instruction about the amount of drug, time and frequency of doses to be taken.

Signature & Instructions:

- Prescription should be signed by the prescriber.
 - -Refill instructions (if needed)
 - -Special instructions (if any)

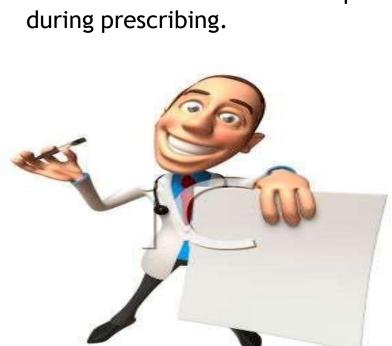


A Prescription should be:

- -Kept simple
- -Abbreviations free (if necessary Latin abbreviations should be used)
- -Trailing zeros should be avoided, Leading zeros must be added
- -It should provide clear and specific directions

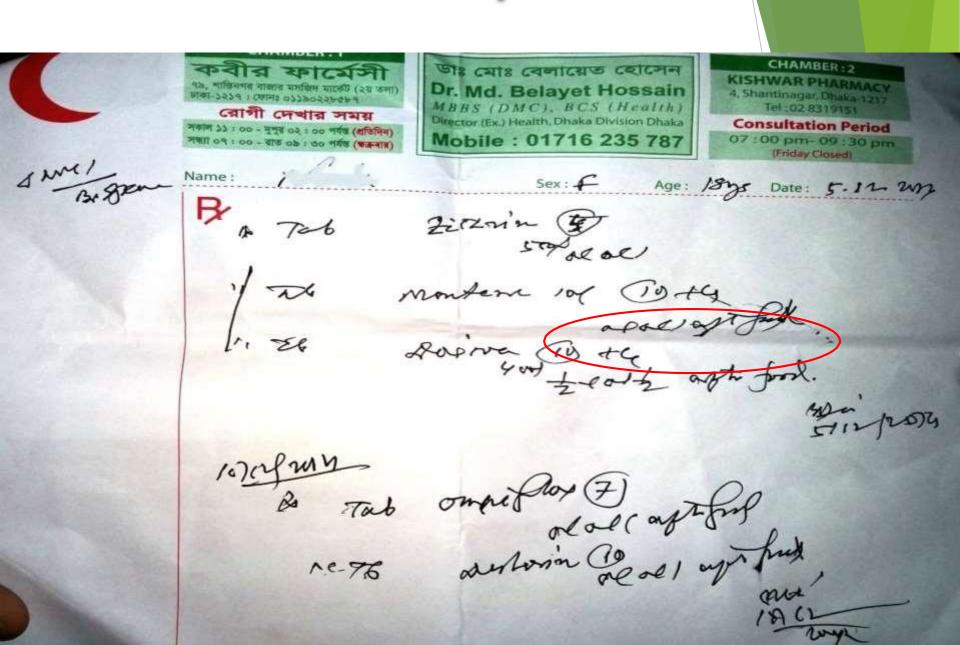
ANALYSING SOME PRESCRIPTIONS

We collected and studied about 20 prescriptions from different patients visiting different doctors in Dhaka and found the problems occurring during prescribing.





The most common problem!





CHAMBER: 1

কবীর ফার্মেসী

৭৯, শান্তিনগর বাছার মসজিল মারেট (২য় তলা) म्बर्ना १८८५ । द्वाना ०३३४०३३५१६ न

রোগী দেখার সময়

সকাল ১১ : ০০ - মূপুর ০২ : ০০ পর্যন্ত প্রতিদিন) সন্ধ্যা ০৭: ০০ - রাত ০৯: ৩০ পর্যন্ত (গুরুনার)

ডাঃ মোঃ বেলায়েত হোসেন

Dr. Md. Belayet Hossain

MBBS (DMC), BCS (Health) Director (Ex.) Health, Dhaka Division Dhaka

Mobile: 01716 235 787

CHAMBER: 2

KISHWAR PHARMACY

4, Shantinagar, Dhaka-1217 Tel:02 8319151

Consultation Period

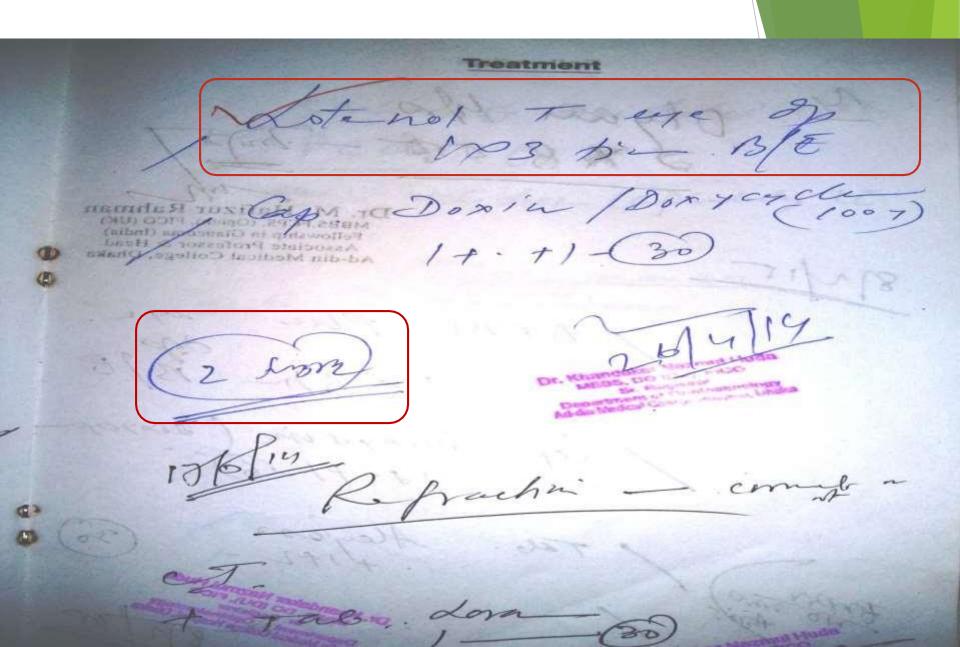
07:00 pm-09:30 pm (Friday Closed)

HOW MANY?



Date: 13.3. 244

NOT ENOUGH INSTRUCTIONS!



DR SALIMA MAHARUD MERSYDMCA HIS (ESHIPA) PROFESSI DEMORRANY (UAMCH) Token Number : 008
Registration Number : 8-69125
Name : / (F)
Age : 21Y 00M 000 Type : General
Bill No : HOS/107527 / CASH (NEW)
Date : 15/11/2014 Time : 5:27:17PM

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T. poremaline
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C. Infra cibilat
Melanosii

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2 Tob. M-kach (10mg)

of of 1 — continue

3 Cop. Candinil (200mg)

of of 2 Gov (10mg)

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4. Neoslen He cream

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25 470 — Botto

5 Sensibio eye gel

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201/200 onlesso Jah

201/200 onlesso

6. Novophane Ds Shawpoo Hogn 2 2 Km Combras

UTTARA CRESCENT HOSPITAL

PLOT No:40, SECTOR-7, RABINDRA SORONI Uttara, Dhoka-1230, Bangladesh Phones: 8954163-64, 8933298, 8912744, 8932430 Mobiles: 01791571281, 01791571283, 01917704150-1.

Blood Cose

B-00069125

7. Hair Vital shauper Norm 2 2 Par Partin

8. Bergamol-Hair lotic.

The 2 no arary

Cath'r dis

Som.

9. Tal. Ortical (400mg)

- otot 1

- swc

10. Tab. Greggert 14

11. Depiwhile body milk for 2 zu 2750 2471.0 Grs.

Revolution State of the service of t

13. Cap. Cod liner oil

There were some prescriptions where we found out that the doctor had taken patient history and it provided a better understanding of the patient's disease condition.

ভাঃ গোবিন্দ বনিক কামিনিক (জনা), কলালকল (গোনিক) (জালেকার পুরারার বাজ) মোকাসন বিশেষজ্ঞ লহকারী হায়ালক, মোকাসন মাকা বেজিকেল কলেল খানলাভাল।	Dr. Gobinda Banik MBBS (Dhaka), FCPS (Medicine) Medicine Specialist Assistant Professor, Medicine Dhaka Medical College Hospital
Name A	Age 18 TR weight Sex 0 Date 11.01.15
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পরনতি সাক্ষা	Visiting Hours: 5.00pm to 9.00pm,
Monowara Rospital (Pv1) Ltd 54, 51d(eshwari Rospital Dhaka-1212 Tel : 831-8529, 631-9602 Mobile : 0170889090-8	

ORGANISED INFORMATIONS!

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পশুলার ভায়াগনস্টিক সেন্টার লিঃ

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PROF. (DR.) PROJESH KUMAR ROY
MBBS FCPS (MED), MD (Gentroenterology)
Gastroenterologist & Physician
Professor Gastroenterology
Bangabandhu Sheikh Mujib Medical University
(Ex-P.G. Hospital), Dhaka, Bangladeah
REG, No. : 5941

(सामी दश्चीय नगरी ह विकास कीर स्टब्स मार्थ करेंद्र विकास स्टूब्स, पुरावन क विकास का मार्थ का विकास

Name: Mr.	M		A	20: 2	-4	Date :	1 9 M	AR 2015
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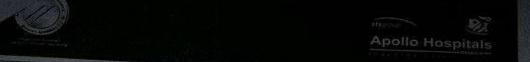
CAMBINAL MARCO

COMPARISON





TYPED PRESCRIPTION Vs. HAND WRITTEN **PRESCRIPTION**



Visit No.

Patient Name ME ME AHMED

Remarks

Age/Sex

11 - 22 Yrs. /M

III III

Prescriptio No. 1 1465118 Prescription Date : 16/03/2015 16:03 PM

> . 0 Vital Sign

12750		Pharmacy Order		10.10
5#			No of Time	No of Day
Pre	scription No: 14651	18		
	GENERIC NAME	: BIOTIN 300 mcg	2	60
	Instruction/Route	: 1+0+1		
2	GENERIC NAME	: CLOBETASOL PROPIONATE 0.05 % (Scalp)	1	7
	Instruction/Route	: APPLY OVER THE SCALP AT NIGHT FOR 7 DAYS		
3	GENERIC NAME	: MINOXIDIL 5 % (TOPICAL SOLUTION)		
	Instruction/Route	APPLY ON BALD AREA OF THE SCALP CONTINUE UNTILL HAIR GROWTH (START AFTER 7 DAYS		
	GENERIC NAME	: NODE DS+Antipelliculaire (Anti-Dandruff) SHMPOO	V#	
	Instruction/Route	: USE OVER THE SCALP IN EVERY ALTERNATIVE DAY CONTINUE		
	GENERIC NAME	: HAIR Loss SHAMPOO (Gro-Medico)		
	Instruction/Route	USE OVER THE SCALP IN EVERY ALTERNATIVE DAY CONTINUE		
	Drug Allergy			
		OP Investigation Order	Value of	
4	Service Name	Remarks		
	Order No. 881	327		
	LABORATORY			
- AV	TESTOSTERONE	SERUM		
	Dehydroepiandro	osterone Sulfate (DHEA-S)		No.

The case of exprence any allergy, skin rash or any other unloward reactions which you thing may be due to medication, contact immediatly to coergoncy department of Apollo Hospitals Dhaka, Apollo emergency contact no. Hothine: 10678, Landline: 8401061, Ext. 2158, Mobile: 017140900001

Prescribed By: Dr. JASMIN MANZOOR

Printed By:

13860

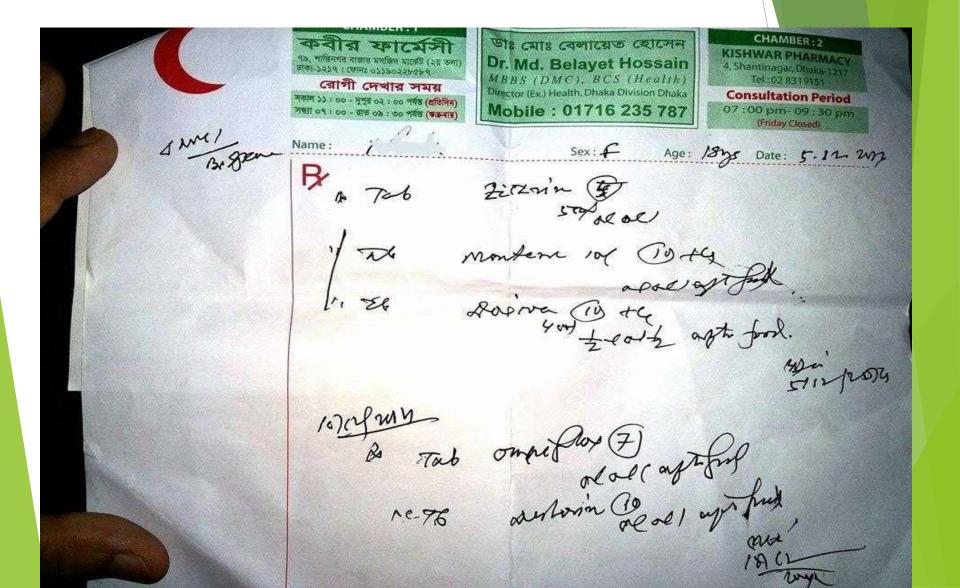
Motes this 16 a Computer Generated Prescription, ******

Printed date/Time: 16/03/2015 16:03

Contact No. 028844242 (For Appointment)

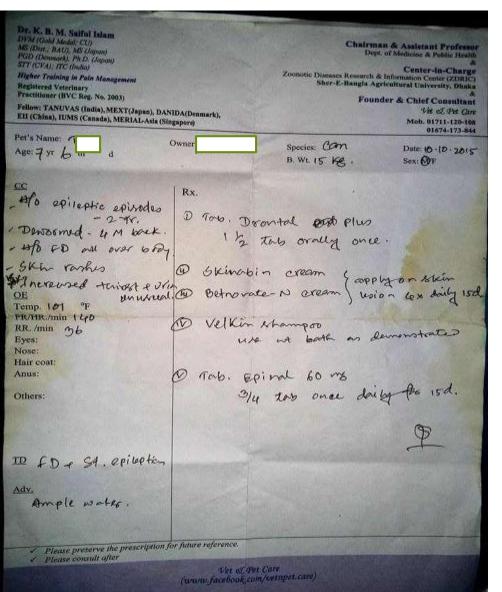
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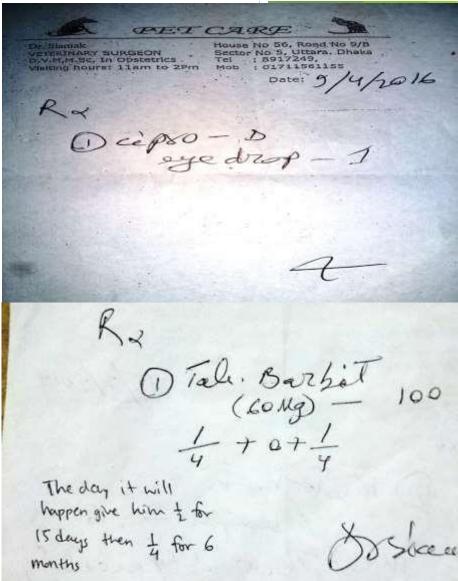
Hand Written Prescription



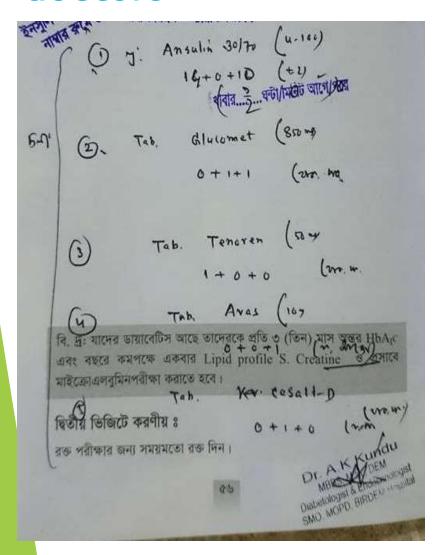
Between Prescriptions from two different veterinary physician

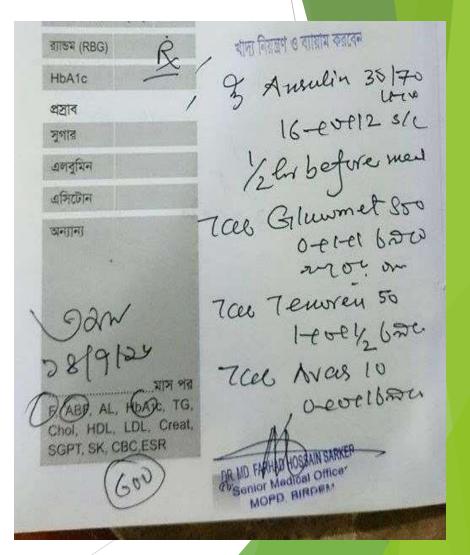






Between prescriptions from Bangladeshi doctors and American doctors





ders From Roday's Med Complete By GLYCOSYLATED HEMOGLOSIN (ASC) 1/13/2016 (Approximate) 4/12/2018 Your Diagnosis From Today's Visit Type I statistics methors, secontrolled - Primary Sobacco dependence in remission Check out Note: Return in 6 weeks (on 1/15/2016) for Diebetes Management Visit. Medications Discontinued this Visit med ORBITH (ARA: GRUCOPSIAGE) 500 mg oral Tablet Eate 1 tablet (500 mg lotal) by mouth become day **Current Medication List** These changes are accorate as of 12/4/15 11:59 PM If you have any questions, ask your name or discha-STOP taking these medications metFORMIN 500 mg Tublet Commonly known as as supportant Slopped by Holm, Mark D, MD TAKE these medications **ACCU-CHEK AVIVA PLUS METER** Deneric drug test-globe h ACCU-CHEK AVIVA PLUS TEST STRP Strp Quentity 200 Each Deneric drug Base Super Dispresso USE TO TEST & TIMES DAILY ACCU-CHEK SOFTCLIX LANCETS Generic drug Larons insufin aspart 100 unitims. Inpo-Commanly known as as NOVOLOG FLEXPEY Breakfast 5 units, Junch 11-12 units, supper 9 units, 4 units for snack pm insufin glargine 100 unitimb (3 mb) ispn. What changed how much to take additional instructions Commonly known as we LANTUS SOLDSTAR Quantity 6 Pen Inject 20 Units subcutaneously insulin every 24 hours. See insulin instructions. Max daily insulin dose Mano Pen Needle 32 gauge x 5/32" Note General drug must resons (Daycoste)

Note: This is the list of medications that we currently have on file for you. Please compare this list of medications with your list of medications at home. Call the prescribing health care provider if you notice any differences.

Your Diagnosis From Today's Visit

Type I diabetes meilitus, uncontrolled - Primary Tobacco dependence in remission

Current Health Issues

Patient Active Problem List Diagnoses

- · Diabetes mellitus type 1
- · Hemoglobin E trait
- Tobacco dependence in remission

Altergies

Difficulty breathing, gets red in his ears and eyes, liching.

Immunization History as of 3/29/2016

INFLUENZA VACCINE

Health Maintenance Summary

HPV Vaccines DTaP/Tdap/Td Vaccines Overdue Overdue

Your Future Appointments (Maximum of 5 display)

Ahmed, Shabin Bin (MR # 10244200) Printed at 3/29/16 11:58 AM

After Visit Summary

Shabin Bin Ahmed 3/29/2016 1:00 PM Office Visit

Provider Holm, Mark D, MD Department Endocrinology Dept Phone 320-229-5000

Ethnicity, Race, Language, Religion, Sex

Race

Asian

Ethnic Group Non-Hispanic Preferred Oral Language

English

Language English

Religion Muslim

Sex Male

Reason for Visit

Diabetes

Instructions

Insulin Management Regimen

Patient Name: Shabin Bin Ahmed

DOB: 7/30/1993

Blood Sugar Testing Frequency: before meals and bedtime

3 am once per week

Fast Acting Insulin: Novolog/aspart

Type of Carb Coverage:	All Meals	Breakfast	Lunch	Dinner	Bedtime	Overnight
1 Unit of Insulin per gram (Carbohydrate)	10				10	10

Glucose Correction Scale	All Meals	Breakfast	Lunch	Dinner	Bedtime	Overnight
Under 60 mg/dL	- 3					
60-80 mg/dL	-1					
81-110 mg/dL	No change					
111-150 mg/dL	10					
151-200 mg/dL	2 3		A COLUMN			
201-250 mg/dL	3			100	19	1
251-300 mg/dL	4				2	+ 5
301-350 mg/dL	5				3	3
351-400 mg/dL	6				4	
Over 400 mg/dL	7			000000000000000000000000000000000000000	5	5

Intermediate/Long Acting Insulin	Breakfast	Lunch	Dinner	Bedtime	Overnight
Lantus (Glargine 100 units/mL) Tresiba (Insulin Degludec) [100 units/ml				21	

Diet & Dosing

- 1. Do not use correction scale if you have eaten or taken Novolog/aspart, Humalog/lispro, Apidra/glui or Regular insulin within the last 3 hours. Do use carb coverage,
- 2. If calculated dose includes a half amount, round down to the nearest whole number.

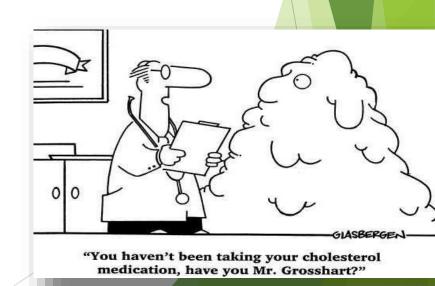
Page 3

Additional Instructions: +2-4 AM checks at least weekly initially. The goal is to have overnight glucoses gre than 80 mg per di with bedtime glucoses greater than 120 mg per di.

hmed, Shabin Bin (MR # 10244200) Printed at 3/29/16 11:58 AM

Ten Steps To Minimize Prescription Error

- 1.Correct entry of the prescription must be ensured.
- 2.It should be confirmed that the prescription is correct and complete.
- 3.A prescriber or pharmacist must be aware of look-alike, sound alike drugs.
- 4. Extra care should be given with zeros and abbreviations.
 - 5. Workplace must be organized.



Ten Steps To Minimize Prescription Error



- 6. Distraction should be reduced when possible
- 7. Focus must be given on reducing stress and balancing heavy workloads.
- 8. Drugs should be stored properly taking adequate time.
- 9. All prescriptions should be checked thoroughly.
- 10. Thorough patient counseling should be provided.











