



Prompting & Monitoring Patient Compliance using SMS

Presented by Gerard Stevens

presented by



INTRODUCTION



- Most people now have at least one mobile phone
- Mobiles mean contact is possible any where and any time
- SMS means instant, direct communication

INTRODUCTION



In 2007 more than 88% of individuals owned at least one mobile phone:

- 18-39 years: 94%
- 40-59 years: 85%
- 60+ years: 73%



SYSTEM SUMMARY



- Text message alerts
- Automatically sent from the pharmacy
- Remind patients to take medication
- Monitor compliance by requesting a reply
- Text message sent to carer if no response

WHO IS IT FOR



- For anyone taking medication
- Short term doses or antibiotic medication
- Monitoring use of particular types of medication
- School children
- Mental health patients
- Elderly patients living at home



MARKETS



1. SOUTH AFRICA

- Aim to improve health outcomes & productivity with mine workers
- High incidence of HIV, Aids & Tuberculosis
- Poor compliance with proven treatments
- Focus on innovative solutions to monitor compliance

MARKETS



2. MENTAL HEALTH PATIENTS

- For use with patients with mental illness
- Ensure antipsychotic medication is taken correctly
- Clozapine usage
- Medications not taken daily
- Maintain independence

MARKETS



3. GENERAL POPULATION

- Anyone taking regular medication
- With a Webster-pak or without a Webster-pak
- Short term or antibiotic medication
- School children, Indigenous population
- Immediate & convenient



SMS PROCESS



- Flexibility to suit each individual patient
- Automatically generated from the pharmacy
- 3 components:
 1. SMS Reminder
 2. Reply
 3. Carer Notification

SMS PROCESS



1. SMS REMINDER

- Patient selects suitable time for each reminder
- Pharmacist selects start date for reminders
- At specified time text message is sent automatically

SMS PROCESS



2. REPLY

- Is a response required?
- Either YES. Quick & Easy
- Or unique three letter code. Identifies individual dose
 - Did they take their medication at the right time?
 - Did they take the correct dose of medication?

HARRISON, Miss Mary 12/02/08		Dr. HANNAN	Ref: 050208.01 (LL)
Medication	Dose/Batch	B*fast	Lunch
Adalat 10mg Tab	1 3x daily	1	1
Aleprim 30mg Tab	1 bedtime		
Panamax500mgTab	1 3x daily	1	1
Uremide40mgTab	1 morning	1	
Valpro500mgTab	1 2x daily	1	
		Dinner	B*Time
			Description
			Pnk mka100BAYER rev
			Qms mkaOK&S yord
			Whi md mka Panamax
			Whi md mkaFE40
			Lic md ent-coated

QRS	RMI	BIT	BMQ
HARRISON, Mary	HARRISON, Mary	HARRISON, Mary	HARRISON, Mary
B*TIME - MON	DINNER - MON	LUNCH - MON	B*FAST - MON
Aleprim 30mg Tab	Adalat 10mg Tab	Adalat 10mg Tab	Adalat 10mg Tab
	Panamax500mgTab	Panamax500mgTab	Panamax500mgTab
	Valpro500mgTab		Valpro500mgTab

BPD	XQW	SIH	BKW
HARRISON, Mary	HARRISON, Mary	HARRISON, Mary	HARRISON, Mary
B*TIME - SUN	DINNER - SUN	LUNCH - SUN	B*FAST - SUN
Aleprim 30mg Tab	Adalat 10mg Tab	Adalat 10mg Tab	Adalat 10mg Tab
	Panamax500mgTab	Panamax500mgTab	Panamax500mgTab
	Valpro500mgTab		Uremide40mgTab
			Valpro500mgTab

Back of Webster-pak

SMS PROCESS



3. CARER NOTIFICATION IF NO RESPONSE

- Is there a carer that needs to be notified?
- Family member, case manager, neighbour
- Carer receives SMS if patient does not reply
- Opportunity to assist the patient



COMPLIANCE MONITORING



- Text message is sent at required time
- Has reply been received?
- Second SMS is sent if no reply
- If no reply to second SMS, carer is notified



Webster-pak is prepared



Webster-pak is given to the patient



Dosage Time is reached



SMS is sent to patient



Has patient responded to SMS Reminder?

YES



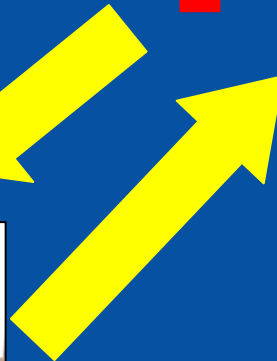
Marked as Compliant



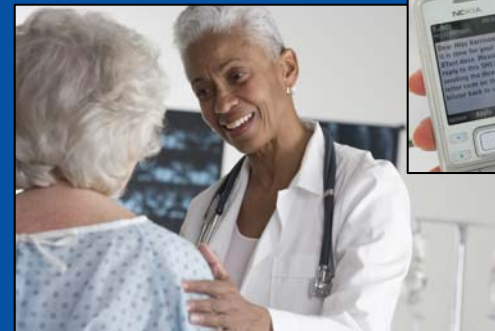
NO



2nd SMS sent to patient



NO



SMS Sent to Carer/Family Member

CAPTURED INFORMATION



- Date and time of SMS sent
- Date and time of reply
- Notifications to carer
- Compliance tracking and reporting
- Medications returned (If in a Webster-pak)



PRIMARY BENEFITS



- Ensure medication is taken at the correct time
- Carers informed of no response so that assistance can be provided
- Prevents unnecessary hospital admissions resulting from poor medication compliance
- Improving health outcomes

WHY IT WORKS



- Most people are accessible via a mobile phone
- No stigma with using a mobile phone, unlike other reminder devices
- Cost effective, simple communication method
- Automated from the pharmacy

COMPLETING THE LOOP



- Each Webster-pak can include a unique barcode
- Barcode used to record medication returned
- Pharmacy scans barcode & records missed dose

Webstercare Returned Medications

**** Webstercare Returned Medications ****





HARRISON
Mary
Community Patients
Dr. HARRISON, Paul

Community

FRONT OF PACK

MON	1	2	3	4
TUE	5	6	7	8
WED	9	10	11	12
THU	13	14	15	16
FRI	17	18	19	20
SAT	21	22	23	24
SUN	25	26	27	28

Select the blisters which still have medications and select an option below

Returned Medications

Ceased Medications


Do Not Return Medications


<< Back

HARRISON, Miss Mary (LL) 12/09/06

Rm: 06

Also on: Ventolin Inhaler




 0 000001 256017


Metropolitan Pharmacy
App No: 12579C Tel: (02) 8514 5300


Pack (1 of 1)


KEEP OUT OF REACH OF CHILDREN

© Manrex Pty Ltd (ABN: 29 974 510 173) t/as - Webstercare - 2005
17-19 Moore Street, Leichhardt NSW 2040 Australia Tel: (02) 9563 4900 Fax: (02) 9563 4955 Free Call: 1800 244 358

 **BREAKFAST**

 **LUNCH**

 **DINNER**

 **BEDTIME**

Multi Dose **webster pak**
Manrex Pty Ltd - Webstercare
Multi Dose Webster-pak
Laser Sun & Moon Header Card Code: 434

Webstercare MMS(R)
6.8.02

CONCLUSION



- SMS reaches intended recipient instantaneously
- Carers informed of no response so that assistance can be provided
- Improves medication compliance
- Improves health outcomes



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