

“Responding to the Pandemic Together” Programme

Episode 21

MyDispense: A virtual simulation to teach pharmacy students across the globe

Delivered by Faculty of Pharmacy and Pharmaceutical Sciences, Monash University



ADVANCING
PHARMACY
WORLDWIDE

Moderator & Lead Panelist

Vivienne Mak, BPharm(Hons), PhD, GCHE, MBA

Lecturer and Simulation Lead
Faculty of Pharmacy and Pharmaceutical Sciences
Monash University – Australia

Expertise:

- Academic Lead for MyDispense
- Assessment of core pharmacist skills through simulation [videos and role play]

Email: Vivienne.Mak@monash.edu

 @Mak_Vivienne



Welcome to the “Responding to the Pandemic Together” events

FIP’s Special Online Programme on COVID-19

These webinars aim to:

- I. Provide relevant information and support to the pharmacy workforce on Coronavirus SARS-CoV-2/COVID-19 pandemic.
- II. Share and discuss strategies and best practice for the pharmacy response to the pandemic.
- III. Describe sector or area-specific challenges and solutions in pharmacy practice and education.
- IV. Engage frontline workers of the pharmacy sector about the realities facing them around the world.
- V. Discuss the implications of the pandemic on the pharmacy sector, shortages that have been exacerbated by COVID-19, across our national borders.
- VI. Consider the impact of this disease on the wider community, and with concurrent conditions.
- VII. Assess and discuss the evidence behind treatments and the process of developing therapies, vaccines and tests.



To share ideas on webinar topics we should feature, or if you'd like to share your story on dealing with the pandemic please email

lina@fip.org

Important Links & Resources

FIP Covid-19 Information Hub

A comprehensive FIP webpage containing all of our resources and outputs relating to COVID-19, including recordings of previous webinars.

Link: <https://www.fip.org/coronavirus>

FIP Facebook Group: “COVID-19 & pharmacy”

Link: <https://www.facebook.com/groups/covid19andpharmacy/>



Announcements

FIP Digital Events House Rules

1. This webinar is being recorded and live streamed on Facebook
2. The recording will be **freely available** at www.fip.org/coronavirus and on our YouTube channel
3. You may ask questions by typing them into the Q&A box
4. Your feedback is welcome (webinars@fip.org)

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Learning Objectives

At the end of this session, participants will be able to:

- Discuss how to introduce MyDispense into the curriculum;
- Share case studies and best practice of the use of MyDispense in teaching and learning;
- Discuss challenges and rewards in using MyDispense as a teaching tool.

Panelist

Marian Costelloe, MA

General Manager
Faculty of Pharmacy and Pharmaceutical Sciences
Monash University – Australia

Email: Marian.Costelloe@monash.edu



Panelist

Clark Kebodeaux, Pharm.D., BCACP

Clinical Associate Professor
University of Kentucky College of Pharmacy- USA

Expertise:

- Practices in an interprofessional ambulatory clinic at the Bluegrass Community Health Center
- Course Coordinator for PaCE in Ambulatory Care (longitudinal clinical lab simulation)

Email: Clark.kebodeaux@uky.edu

 @ClarkKebodeaux



Panelist

Lisa Holle, PharmD, BCOP, FHOPA, FISOPP

Associate Clinical Professor
University of Connecticut School of Pharmacy- USA

Expertise:

- MyDispense lead at UConn
- Course coordinator for Oncology Therapeutics; lead for MyDispense in Law and Pain Management Elective
- Board-certified oncology pharmacist and practices in a team-based clinic UConn Health's Neag Cancer Center

Email: lisa.holle@uconn.edu

 @lisamholle



Panelist

Jill Fitzgerald, PharmD

Director, Experiential Learning and Continuing Professional Development
University of Connecticut School of Pharmacy - USA

Expertise:

- Skills Course coordinator across the curriculum
- Experiential Education
- Continuing pharmacy education/continuing professional development
- Hospice rotation preceptor

Email: Jill.fitzgerald@cox.net

 @drjillfitz



Panelist

Sarah Vordenberg, PharmD, MPH, BCACP

Clinical Associate Professor
University of Michigan College of Pharmacy - USA

Expertise:

- Course coordinator for the first year Pharmacy Practice Skills I and Self-Care courses incorporating MyDispense.

Email: skelling@med.umich.edu

 [@sarahvordenberg](https://twitter.com/sarahvordenberg)



Panelist

Pui San Saw, BPharm(Hons)

Lecturer
School of Pharmacy
Monash University – Malaysia

Expertise:

- MyDispense lead at Monash Malaysia
- Student experiential learning

Email: saw.pui.san@monash.edu

 [@puisan_saw](https://twitter.com/puisan_saw)



Welcome to MyDispense

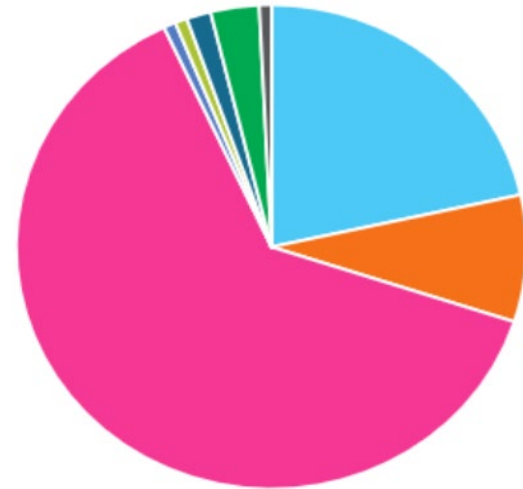
- A growing Global Community of Practice
- MyDispense is free of charge and always will be
- MyDispense will continue to be developed to ensure its relevance in pharmacy teaching



Marian Costelloe
Monash University – Australia

MyDispense Statistics

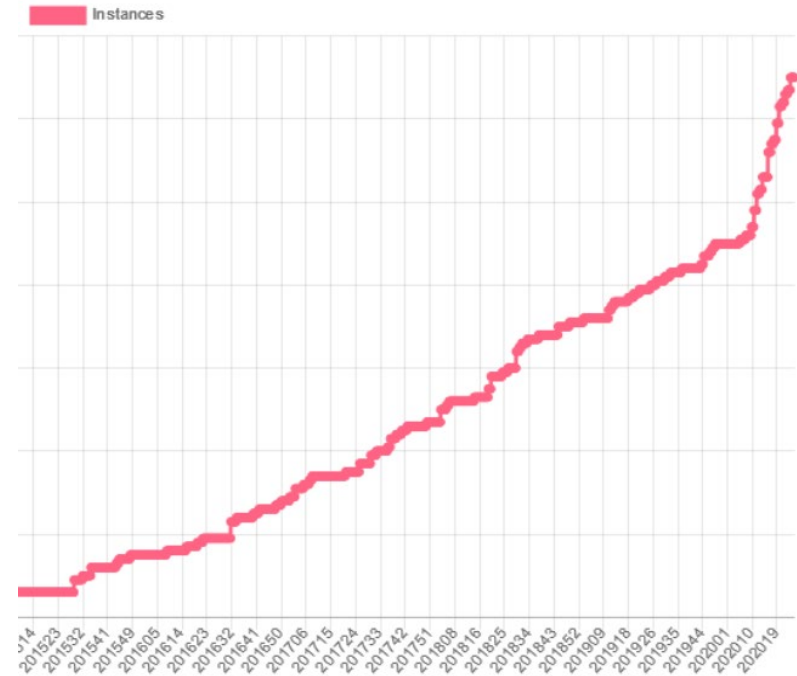
- **130** institutions are sharing MyDispense
- Almost **19,000** students enrolled globally
- Students have logged in almost **240,000** times
- Over **800,000** cases (exercises) have been undertaken by students globally.



COVID-19 MyDispense Growth

- Recent growth has been unprecedented
- We expect more to come, so please be patient
- Moving to a central email support address:

mydispense1@monash.edu



Global collaboration | Better together

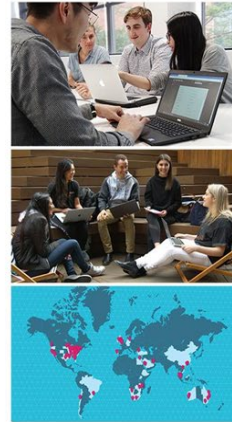


Overview



Virtual pharmacy simulation

Reimagine Education
Award Winner 2018



Used here & around the world



Vivienne Mak
Monash University – Australia



ADVANCING
PHARMACY
WORLDWIDE



MONASH
PHARMACY AND
PHARMACEUTICAL
SCIENCES

Overview

Dispense Screen

Shirley Parkes x Age: 65 years old MClare: 4692 1359 JQ 9 Address: 19 Ashwood Dr, Pharmsville
 Phone: 61435716199 Concession Type: None Concession No: N/A Victoria 3052

Script Date: 26/06/2020 Script type: Doctor (PBS)
 Prescriber: Fiona Jones Prescriber No: NB47790
 Drug: DUROGESIC 12 12mcg/hr Patch
 Directions: Apply ONE (1) patch to the upper arm and replace every three days.

Dispense records				
Date	Rx No	Qty	Rpt	
12/06/2020	010069	5	0	DUROGESIC 12 12mcg/hr Patch

Label Preview:

KEEP OUT OF REACH OF CHILDREN

DUROGESIC 12 12mcg/hr Patch Qty 30 Rpt 0
 Fentanyl 12mcg/hr Patch
 Apply ONE (1) patch to the upper arm and replace every three days.

Shirley Parkes
 26/06/2020 Fiona Jones VM
Pharmsville Community Pharmacy
 48 High St, Pharmsville 3052 Ph: 5877 2184 Prep: L. Wilson

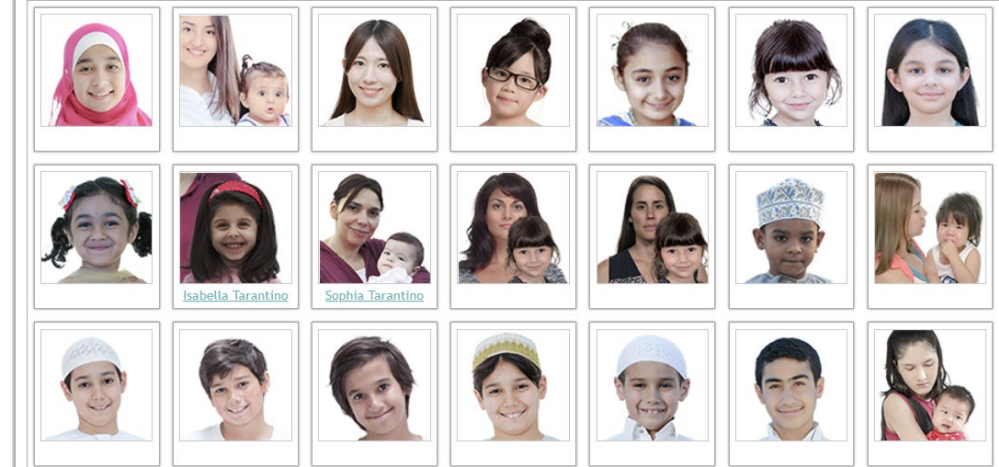
Print Label Label Manager

Repeats: 0 Quantity: 30 Pharmacist: VM

Closing the gap



Overview



<https://info.mydispense.monash.edu/>

MyDispense at University of Kentucky



Clark Kebodeaux
University of Kentucky – USA

UK College of Pharmacy

Welcome to MyDispense

MyDispense

MyDispense is an online pharmacy simulation that allows you to develop and practice your dispensing skills. It provides a safe environment in which you may make mistakes without experiencing the serious consequences of practising in the real world. For your maximum benefit use MyDispense as seriously as you would when dispensing medicines in real practice.

Login

MyDispense Version 0.0.0 Beta 0 USA

Supported browsers:
Edge 14+, Chrome 49+, Firefox 44+, Safari 10+

Patient-Centred Care Experience (PaCE)

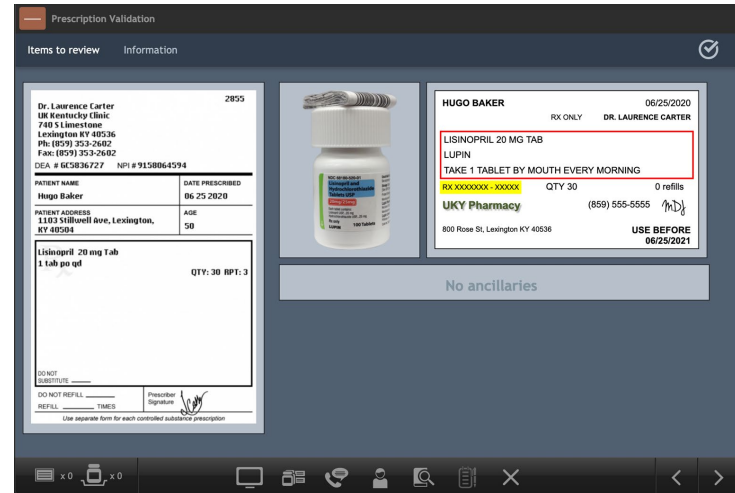
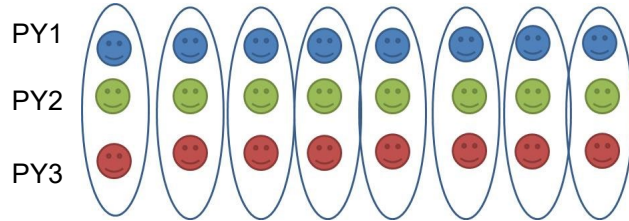
- **PaCE Overview**

- The course is designed to assist in developing the knowledge, skills, and attitudes needed to fulfill the professional and technical responsibilities necessary to provide patient-centered care and manage the medication use system.
- Six-semester course sequence



MyDispense in PaCE

- The PaCE course structure integrates PY1, PY2, and PY3 students into concurrent weekly laboratory sessions and intermittent complementary experiential education experiences



MyDispense Assessment - PaCE

- *MyDispense is used for longitudinal assessments across the full sequence of the PaCE course*



Exercise items

Auto-marked criteria

	Student Answer	Correct Answer	
Error outcome	Dispense	Dispense	4.00
Patient fact finding	Question - Type Allergies - Must ask Other medications - Must ask	Mark +2.00 +2.00	4.00
Prescriber fact finding	Question - Type Dosing query - Must ask	Mark +2.00	2.00
Script date	Label 1: 02/06/2020	02/06/2020 1/1 label(s) correct Calculated total: 1.00	1.00
Prescriber	Label 1: Dr. Robert Bale (43)	Dr. Robert Bale (43) 1/1 label(s) correct Calculated total: 1.00	1.00
Patient	Label 1: Miss Harare Sawalha (211)	Miss Harare Sawalha (211) 1/1 correct Calculated total: 1.00	1.00

Mastering the Pharmacist Patient Care Process

- *Therapeutics*
- *Ethics and law*
- *Community pharmacy practice*



Lisa Holle
University of Connecticut – USA

Therapeutics

Was there anything you wanted to ask?

I'm really worried that my mom is experiencing an overdose. What should I do?

Well, she is sleeping most of the day and night since starting her fentanyl patch two days ago.

She just was switched from MS Contin to a fentanyl patch for her cancer pain. She also takes amlodipine for high blood pressure.

You ask about symptoms

You ask about other medications

Ask About:

- Previous use of medication(s)
- Hospital admission
- Illicit drug use
- Other medications** Asked
- Pregnant

Recommend OTC

Do not recommend

Counseling

Your counseling points were:

“ Your mother is sleepy because of her increase in opioid dose. This should get better over the next couple of days. It is good that she is getting up and going to the bathroom. If her sleepiness does not get better you should call her doctor.

I would have counseled the patient as follows:

“ I'm sure you must be very concerned about your mother. It is not uncommon for patients to feel sleepy when starting a new long-acting pain medication or with a dose increase. Because she is arouseable and gets up to eat and go to bathroom, it is likely that she will feel less sleepy in the next couple of days. If that doesn't happen, contact her doctor. Also signs that she might be getting too sleepy would be if you cannot easily arouse her by tapping her or moving her arm for example. If this happens, you should call 911 or give her naloxone if you have some on hand.

Information Gathering

Your Fact Finding for this exercise was very good. You gathered all of the essential information to complete the exercise without asking any inappropriate questions.

You discussed these required topics with the patient:

- Allergies
- Other medications
- Symptoms
- Other symptoms

You asked the patient about the following topics:

- Age
- Previous use of medication(s)
- Purpose of medication(s)

CARMEN ALVAREZ RX ONLY DATE 05/14/2020
DR. ROB LAMENTO

MS CONTIN 30MG CR TAB (MF)
TAKE 2 TABLETS (60 MG) BY MOUTH EVERY 12

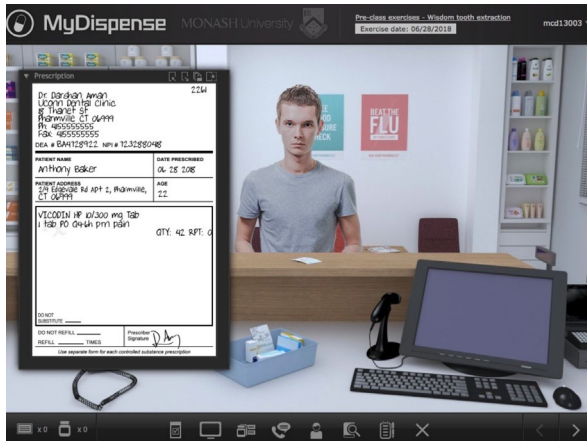
RX XXXXXXX - XXXXX QTY 120 0 refills

Fact Finding feedback

Make sure that you ask the important questions about symptoms, allergies.

XX USE BEFORE 11/10/2020

Law and Ethics

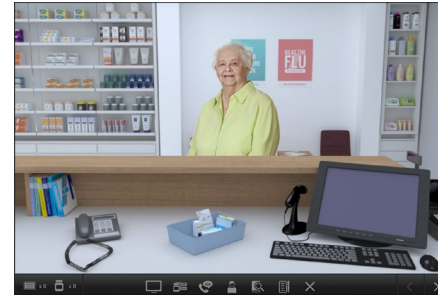
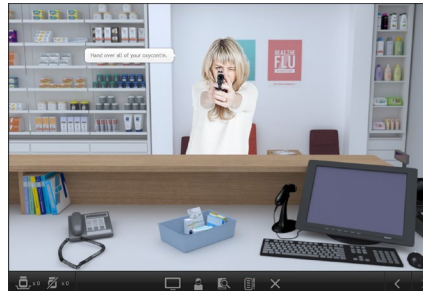
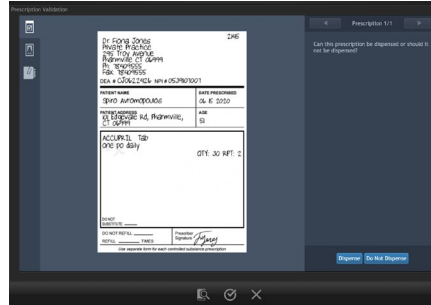


Module 4 Exercises - Exercise #6

Exercise date: 06/18/2020

The patient presents you with a prescription for naloxone written by your partner pharmacist who is certified to prescribe naloxone in CT. Note this exercise has an attachment, which can be found by clicking on documentation icon, and selecting attachment. Complete this documentation and also upload to HuskyCT.

Ok



Pharmacy Practice Experiences



Jill Fitzgerald
University of Connecticut – USA

First year students (P1) - Introductory Pharmacy Practice Experience - completed before they are onsite

- *Self-care patient counseling*
- *OTC meds/scenarios*
- *Prescription processing and verification*

Pharmacy Practice Experiences

Final year professional students (P4) - Advanced Pharmacy Practice Experience

- *Reinforce law concepts in community practice*
- *Provide cases for discussions of situations that reinforce major concepts or are rare*
- *Used during COVID-19 transition to remote learning to meet community rotation outcomes*

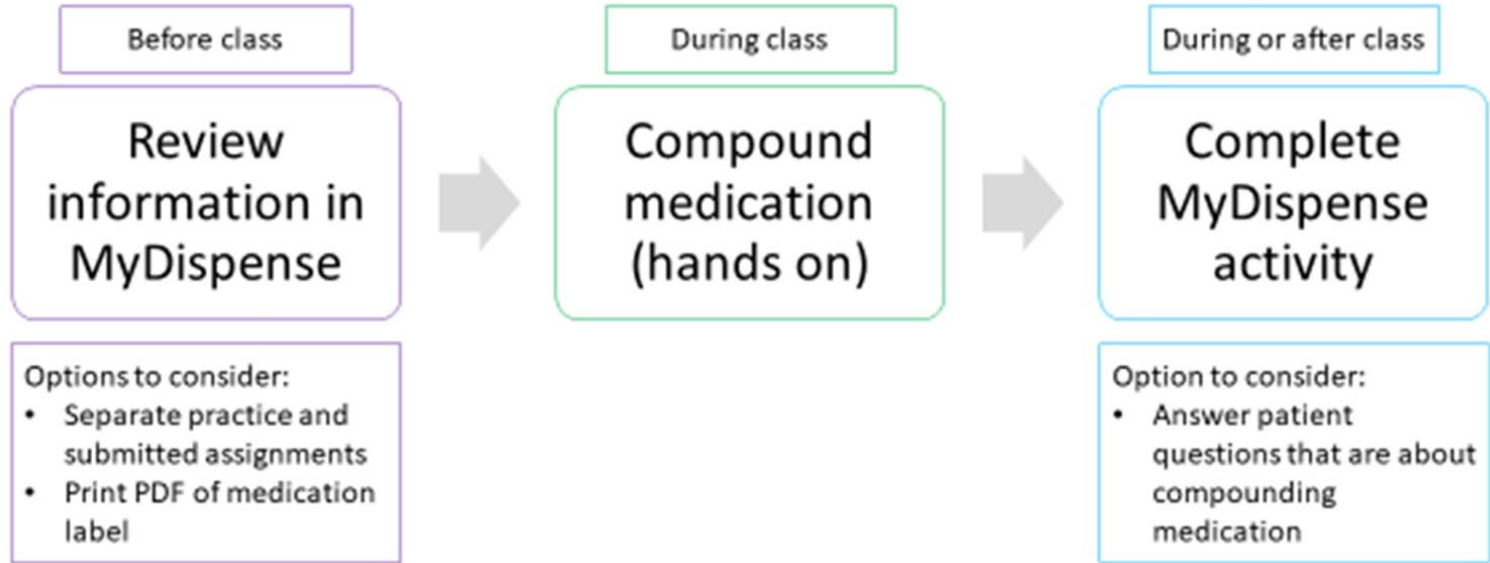
Skills activities

- ***Pharmacy Practice Skills I***
 - Student determines level of practice needed
 - Hybrid compounding activity
- ***Self-Care Therapeutics***
 - Decision-making regarding self-care encounters
 - Reinforcement of course content



Sarah Vordenberg
University of Michigan – USA

Hybrid compounding activity



Prescription 2663

Dr. Rob Lamento
University of Michigan Health System
4 Cremorne St
Ann Arbor MI 48109
Ph: 73430321
Fax: 73430321
DEA # BL0622426 NPI # 8185943467

PATIENT NAME Iris Knight	DATE PRESCRIBED 06 12 2020
PATIENT ADDRESS 1 Chat suor th Dr, Ann Arbor, MI 48109	AGE 83

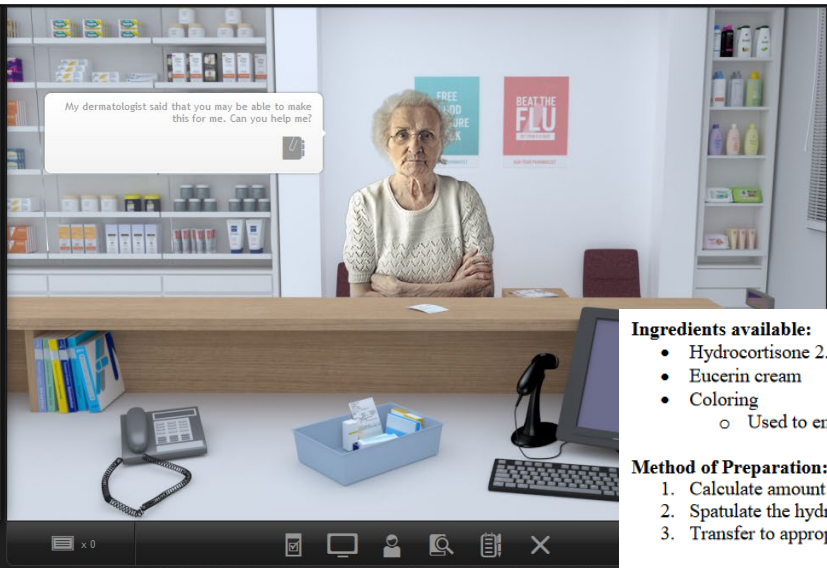
Hydrocortisone cream 0.025% Cr
AAA TID PRN QTY: 60 RPT: 1

DO NOT SUBSTITUTE

DO NOT REFILL _____
REFILL _____ TIMES

Prescribed Signature

Use separate form for each controlled substance prescription



Ingredients available:

- Hydrocortisone 2.5% cream
- Eucerin cream
- Coloring
 - Used to ensure that the two white creams are evenly mixed

Method of Preparation:

1. Calculate amount of each ingredient to prepare, assuming a 10% excess is desired.
2. Spatulate the hydrocortisone, eucerin, and coloring (5 drops) together on an ointment slab.
3. Transfer to appropriate ointment jar, label and dispense.

Self-care encounters



- Non-pharmacologic counseling points:
 - Provide a minimum of 2-3 counseling points
- Pharmacological counseling points:
 - Name and strength of medication along with amount of medication, route of administration, and maximum amount of medication per day (if appropriate)
 - Administration information
 - Onset of action/ expected time to see effect
 - Common and severe side effect and what to do to manage them, if appropriate
- General counseling points and follow up

Contextualization

- Cultural adaptation
 - Drug scheduling
 - Use of complementary and alternative therapies
- Multi-ethnic society with different cultural influences
- “Virtual” community/hospital pharmacy



Pui San Saw
Monash University – Malaysia

Contextualization

Step 1

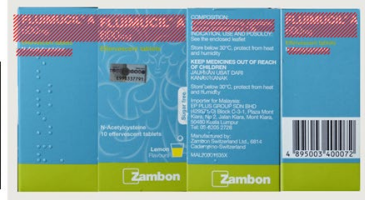
- Exercise – culturally adapted
 - Warfarin + ginseng
 - Statin + red yeast rice

Step 2

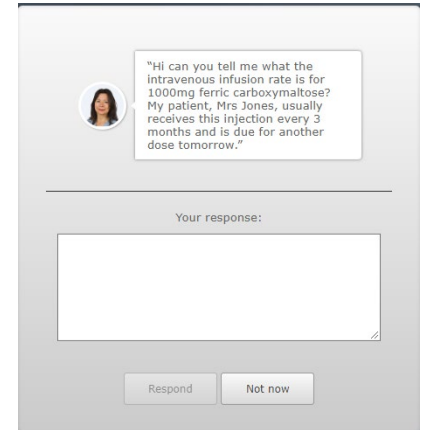
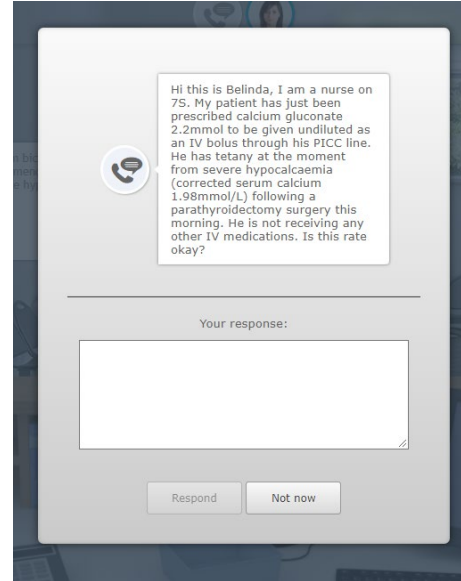
- Product images
 - e.g. Acetylcysteine (Fluimucil A)
 - Patient avatars

Next

- Outlook
 - Drug shelves – OTC, pharmacist only medicine
 - Prescription



Hospital Pharmacy Simulation



Workshop 4A - Workshop 4A



Exercise date: 30/11/2019

You are the duty pharmacist working in a busy hospital pharmacy. Complete the tasks in this simulation as you would in practice.

Ok

Faculty training

- *How long does it take for faculty to be familiar with the simulation?*
- *How much time does it take to create an exercise?*

Student experience

- ***How long does it take for students to be familiar with the simulation?***

“I wouldn’t say MyDispense takes the place of a (clinical placement) but it’s a good supplement to learning, given face-to-face is not possible during COVID” – Aisling McEvoy, P4 Student, Monash University - Australia

She says having access to MyDispense has helped build confidence in her dispensing skills before graduation

Rewards of using MyDispense during COVID-19

- *Self-practice*
- *Implement quickly with existing exercises*
- *Easy to use and accessible*
- *Satisfies learning objectives*
- *Lifesaver for professional experiential coordinators and faculty*
- *Timely graduation!*



Thank you for participating!

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Please provide your feedback through the 4-question survey that will appear to you at the end of the event