



## Singapore Healthcare Management 2023

# Oral Vancomycin Video

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## Background

Vancomycin is an antibiotic, when taken by mouth is used to treat *Clostridium difficile* (*C.diff*). This infection affects the intestine which can cause watery or bloody diarrhea. Oral vancomycin works only in the intestine and is not normally absorbed into the body. As vancomycin is normally meant for injection route and comes in a vial formulation, patient or caregiver must be taught on how to reconstitute and prepare the medication for oral consumption.

Current practice involves incomplete antibiotic treatment, however patient is fit to be discharged from hospital, therefore patient has to continue the treatment at home. Patient brings back the vancomycin vials with verbal instructions from pharmacist during dispensing. However patient or caregiver may not have hands-on demonstration or missing consumables to perform reconstitution of the medication.

## Mission Statement

Ensure patients and caregivers are able to prepare oral vancomycin at the comfort of their home after discharge.

## Root Cause Analysis

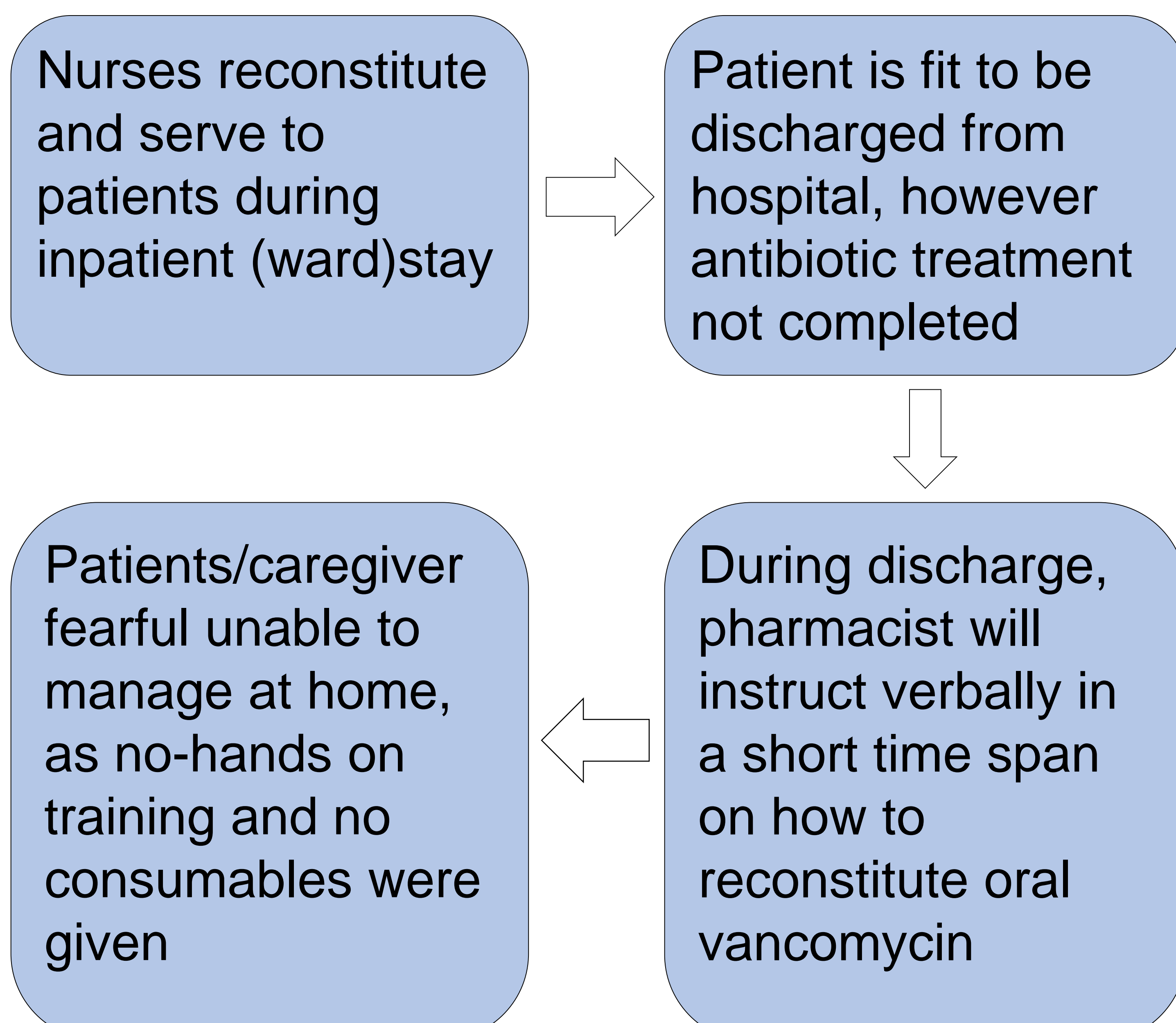
Through direct observation, pharmacist realized patients with oral vancomycin are sometimes not well equipped with the information, consumables and visual training on how to prepare it at home.

During inpatient ward stay, patients' medications are served and administered by nurses. For vancomycin, it is only available in vials normally given through injection, however for certain patients' condition, it is used for oral consumption instead. During discharge, nursing staff needs to perform multiple administration tasks and may not have sufficient time to plan ahead and instruct patient and caregiver with hands-on training on how to reconstitute the medication.

Similarly for pharmacy inpatient side, discharges are done during peak hours from 11am-1pm. During dispensing, there is no information leaflet for patients or caregivers and they are concerned on managing it themselves at home as pharmacist is only able to counsel verbally.

Consumables to prepare oral vancomycin is not provided to patient and caregiver when they come down to inpatient pharmacy to collect medications. Often than not, they are reminded to collect from the nursing side in the ward before they head home.

Below is a flow chart on the process.



## Interventions/Initiatives

Since hands on training can be daunting in the ward, the team worked together with pharmacy lab to produce an instructional video on the preparation of oral vancomycin. In addition, a form was created for nurses to order the consumables needed, thus preventing the lapse.

Edits were done based on feedback from SKH communications team, Ms Deborah Chua and outpatient pharmacy workgroup team. Completed video is uploaded on SKH Youtube channel and QR code provided to patients and caregivers to view at home on top of pharmacist verbal counselling during discharge.

## Implementation Plan

S/N	Implementation Plan	Responsible	Date
1	Collaborated with pharmacy lab team to produce video on how to reconstitute oral vancomycin	Lab team	June 2021
2	Finished video production	Lab team	July 2021
3	Video editing	Shereen	August 2021
4	Review video Uploaded video on Youtube	Communications Deborah Chua	Sep-Oct 2021 Nov 2021
5	Launched instructional sheet	Shereen	Nov 2021
6	Receiving feedback	Project Team	Jan 2022
7	Launched consumables order form	Jia Yun	Feb 2022

## Results/Conclusion

Instruction sheet (as shown below) is provided to patients and caregivers who are discharged with oral vancomycin. Feedback link with regards to the video is also provided. There is no feedback received thus far from patients or caregivers.



In addition, pharmacy collaborated with nursing and Pharmicare side to set up a list exclusively for consumables needed for preparation of the oral vancomycin. Nurses can then order the correct amount and type of consumables based on the duration of treatment that is prescribed for the patient.

Future plan is to create a pictogram on how to prepare oral vancomycin which will further complement the existing instructional video.