What is possible for food service continuity during the COVID-19 pandemic?

Jacinta Bryce[1], Susan R Davis[1], Andrew Slattery[1], Sarah Cooper[1], Sarah Hill[1], Andreas Seibold[2], Suzi Vrbat[2], Rodney Rosewarn[2], Sanjay Prasad[2], Danial Farias[2]
Nutrition Department, Canberra Health Services, Canberra ACT 2605. Food Services, Canberra Health Services, Canberra ACT 2605.
Email contact: Jacinta.Bryce@act.gov.au

Introduction

Evidence for pandemic preparedness in food services (FS) is limited. COVID-19 prompted planning for continuous provision of food and nutrition at the Canberra Hospital (TCH) which serves over 2500 meals daily. Scenarios were planned to account for potentially reduced staffing, increased patient admissions, and possibly interrupted supply chains.

TCH FS system operates as a cook-chill, tray line plated food service model with an electronic menu management system (delegate/MyMeal). A large proportion of meals are usually made in-house by production staff, including several labour-intensive meal components, such as sandwiches and desserts.

Aims

To offer an alternate FS model for inpatients and staff.

To develop meals which met nutrition standards[1], required reduced labour and were available from multiple suppliers.

Methods

Nutrition and Food Services considered all COVID response stages across: Staff workflows, food supply, menu innovation and meal delivery.

Results

Staggered shifts and breaks were introduced to counteract non-modifiable factors present in FS, including suboptimal ventilation and to encourage reduced staff interaction[3]. Face masks were required in confined spaces with limited opportunity for physical distancing, such as on the plating tray line[4].

Labour intensive in-house production was replaced with sealed portion-control (PC) items sourced from external suppliers, including replacing in-house made desserts with PC desserts.

A new portable freezer was installed to store frozen meals, which were sourced from several suppliers, before commencing production in-house. FS COVID-19 procedures[4] were written to safely handle frozen meals – including allowing for thawing of frozen meals prior to retherming.

All frozen meals were analysed to assess compliance with nutrition standards and coded to therapeutic diets in the MyMeal FS management system. Fourteen-day default menus were created for the following diets: General, Diabetic, Vegetarian and Gluten Free. Default meals consisted of soup, a hot meal served with seasonal vegetables and potato/rice, a dessert, and water, with a sandwich for a midmeal snack.

Food provision processes were transformed on COVID wards, with provision of default selections only and automation of disposable trays and tableware. Trollies were left outside wards for meal distribution by clinical staff. Staff meals were provided to reduce movement.

Excerpt from Food Services COVID-19 Procedures[4] – Providing main meals at full capacity

Step	
1	Once diet is assigned in DietPAS appropriate meal will be assigned to the patient
2	Meals are delivered to the ward by FS staff member to Zone A
3	Further redistribution of supplies and food will be attended by support staff within the zone, determined by the clinical leadership and available staff at the time-box with yellow sticker from the cold side of the trolley; place the hot meal into it and service to the patient
4	ISS staff to dispose box with left overs into clinical waste
5	FS staff member to collect trolley for cleaning and disinfection

Conclusion

Contingencies were planned and successfully executed to introduce an alternate FS model using a reduced menu of frozen meals that could be prepared with existing FS kitchen facilities while supporting staff physical distancing and infection control measures.

Significance

Ultimately, all vulnerable patients received high quality, uninterrupted, nutritious food provision.

Plating tray line

Portable freezer

Frozen meal

References
1. Hale, M., and Dayot, A. (2021) Brief report - Outbreak investigation of COVID-19 in hospital food service workers. Am J Infect Control 49:396-7
2. Agency for Clinical Innovation. Nutrition standards for adult inpatients in NSW hospitals. Sydney: NSW Agency for Clinical Innovations; 2011
3. World Health Organization & Food and Agriculture Organization of the United Nations. (2020). COVID-19 and food safety: guidance for food businesses: interim guidance, 07 April 2020. World Health Organization
4. Canberra Health Services. Food Services COVID-19 Procedures and Food Safety Updates. April 2020

 2021 Designed & Printed By Canberra Health Services Library, Multimedia. BEN3134