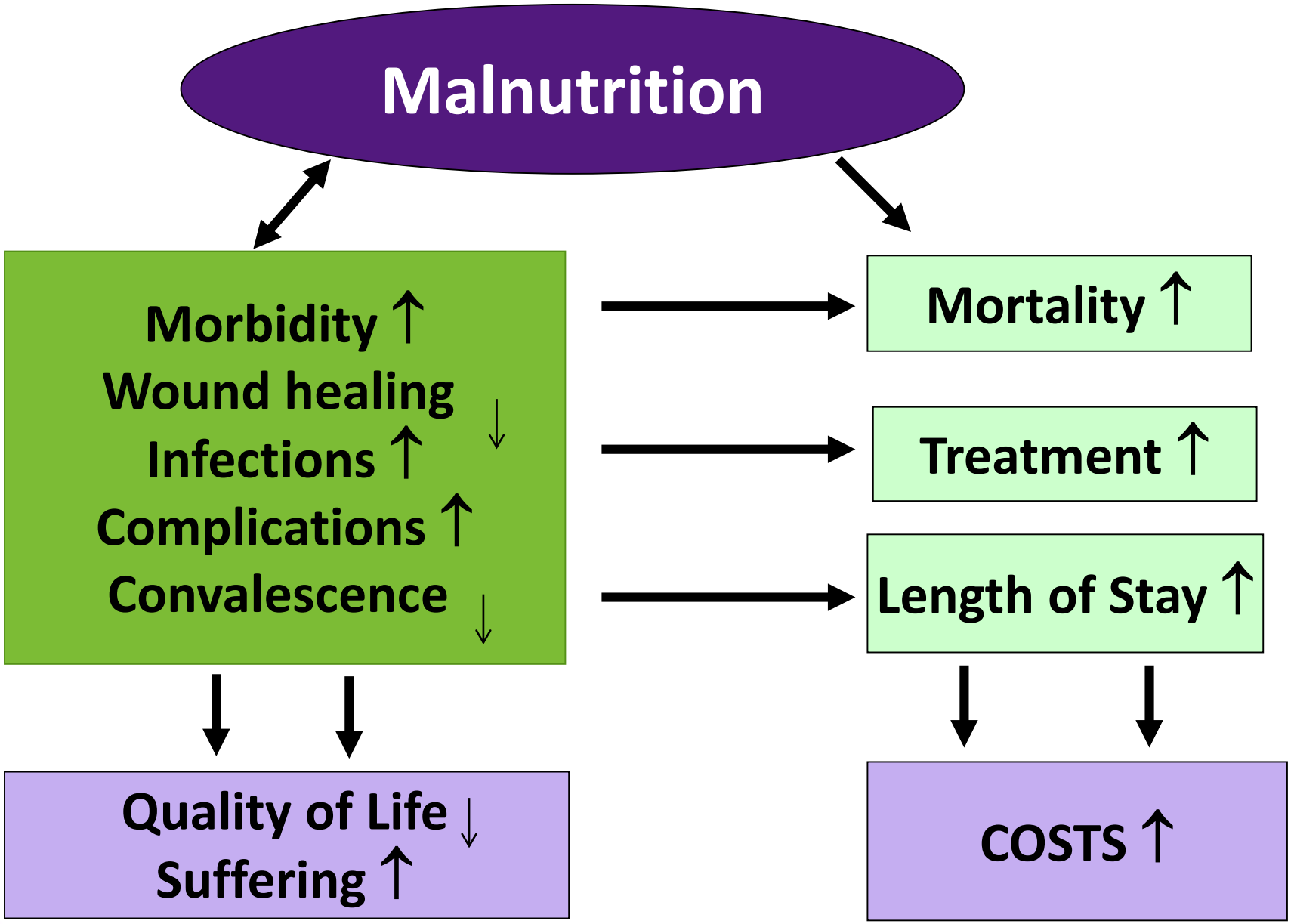
Becoming "Food Aware" in Hospital

Strategies to improve food intake and the nutrition care culture

Canadian Malnutrition Task Force™ | le Groupe de travail canadien sur la malnutrition™

Advancing Nutrition Care in Canada /Améliorer les soins nutritionnels au Canada


Malnutrition
Morbidity ↑
Wound healing ↓
Infections ↑
Complications ↑
Convalescence ↓
Mortality ↑
Treatment ↑
Length of Stay ↑
Quality of Life ↓
Suffering ↑
COSTS ↑

Hospital Malnutrition in Canada

- Almost 1 in 2 medical or surgical patients who stay 2+ days are malnourished at admission (Allard et al., 2015)
- Less than ¼ of patients see a dietitian, most of these patients are not malnourished; 75% of malnourished are missed (Keller et al., 2015)
- Malnutrition at admission extends length of stay by ~3 days
- Patients who deteriorate have a longer length of stay (medical 18 days; surgical 12 days) (Allard et al., 2016)
- 2/3 of patients leave in the same nutritional state as admitted while 1 in 5 gets worse (Allard et al., 2016)

Hospital Malnutrition in Canada

- Poor food intake (≤50%) in the first week of hospital stay occurs for ~35% of patients (Allard et al., 2015)
- Poor food intake during admission predicts length of stay when adjusted for other covariates such as malnutrition at admission (Allard et al., 2015)
- 77% of physicians agreed that using dietitian expertise more extensively would be helpful (Duerksen et al. 2016, JPEN)
- Over 50% of nurses thought malnutrition occurred in <25% of patients (Duerksen et al. 2016, JPEN)

Barriers to Food Intake

- Organizational (noise, interruptions)
- Choice (meal timing, limited menu selection)
- Food access/hunger (lack of food availability)
- Eating difficulties (opening packages, reaching food)
- Quality/choice/satisfaction with food (taste, appearance, smell)
- Effect of illness on food intake (poor appetite, pain)

Keller et al, JHND 2015

Organizational Barriers to Food Intake

- Disturbed by activities, noises or unpleasant smells **(38.9%)**
- Interrupted by the hospital staff **(41.8%)**
- Missed meals by not being available when they were served **(19.9%)**
- Missed meals because of avoiding food for tests **(34.7%)**
- When meals missed, not give hospital food by staff (Patients answered 'did not miss a meal' excluded) **(69.2%)**
- Did not get help when needed (restricted to patients who needed help) **(42.2%)**
- Did not want food that had been ordered* **(58%)**
- Did not receive ordered food* **(27.6%)**

Canadian Malnutrition Task Force | le Groupe de travail canadien sur la malnutrition
Advancing Nutrition Care in Canada / Améliorer les soins nutritionnels au Canada

*only for hospitals with selective menus

Keller et al, JHND 2015

Choice

11.9% Meals not served at times that suit patient

3.9% Do not understand how to complete the menu selection sheet*

23.3% Not being able to choose preferred foods*

36.9% Not enough information on menu to make selection*

*only for hospitals with selective menus

Hunger

30.1% Visitors bring in food because patient is hungry

24.4% Become hungry between meals that are too far apart

11.5% Felt hungry but could not ask staff for food

12.2% Felt hungry and wanted something to eat but no food was available from the hospital

Canadian Malnutrition Task Force | le Groupe de travail canadien sur la malnutrition
Advancing Nutrition Care in Canada / Améliorer les soins nutritionnels au Canada

Keller et al, JHND 2015

Eating difficulties

27.2%	In an uncomfortable position to eat
19.7%	Difficulty reaching food
16.1%	Difficulty cutting up food
30.1%	Difficulty opening packets/unwrapping food
8.7%	Difficulty feeding self
7.4%	Not enough time to eat all the food
7.8%	Needed help to eat meals

Quality/satisfaction with food; dissatisfied with:

28.8%	Taste
16.3%	Appearance
18.1%	Smell
19.4%	Portion Size
21%	Temperature of food

Canadian Malnutrition Task Force | le Groupe de travail canadien sur la malnutrition
Advancing Nutrition Care in Canada / Améliorer les soins nutritionnels au Canada

Keller et al, JHND 2015

Effect of Illness on Food Intake

63.9%	Loss of appetite
42.7%	Sickness
41.1%	Tired
37.4%	Pain
25.1%	Worried
20.0%	Depressed
17.1%	Breathing difficulties
15.2%	Chewing or swallowing difficulties

Canadian Malnutrition Task Force | le Groupe de travail canadien sur la malnutrition
Advancing Nutrition Care in Canada / Améliorer les soins nutritionnels au Canada

Keller et al., JHND 2015

Shared Responsibility

Being “Food Aware” in hospital is the responsibility of:

- ✓ All hospital staff, including senior management
- ✓ Volunteers
- ✓ Patients
- ✓ Families/Friends

Strategies: Correcting Knowledge Barriers

- **Education and training** for all staff including hospital management on their role in preventing malnutrition.
- **Key opinion leaders** communicate messages effectively to stimulate change in behaviour of other staff.
- **Reminders** put in place to convert training into routine practice and sustaining changes.
- Institute policies that promote **focus on patient food intake** at meal time.

Strategies: Promoting Food Intake of Patients

- Have staff (potentially a diet technician) **identify food preferences,** help with filling in the menu, and communicate these to food services.
- Staff and families/friends should know that mealtimes need to be **focused on eating** meals and nourishments.
- Staff and family/friends need to **encourage food intake**.
- When possible, encourage patients to **eat with a group** of patients or family/friends.
- **Meal interruptions** for tests or other medical procedures should be avoided.

Strategies: Preventing Barriers to Eating

- Sit patient in chair or **position upright** in bed
- Ensure bedside **table is cleared** for tray set-up, **open packages, provide assistance to eat,** if needed
- Promote a **pleasant eating environment** by considering the noise, smells and other environmental barriers to food intake
- Ensure **vision and dentition** needs are addressed
- Provide nausea, pain, constipation control
- Monitor for **signs of dysphagia**

Strategies: Food Provision

- Ensure **food is available** at all times of day, especially when a meal is missed
- Encourage family to bring preferred **foods from home** that are nourishing; provide safe storage for these foods
- Staff should be aware that oral nutrition supplements (ONS) are appropriate in some cases, but there are benefits associated with meals that ONS cannot provide
- Consider in-between meal snacks to support food intake

Strategies: Monitor and Report

"Staff/family/friends and the patient need to monitor food intake and when it is low, implement advanced strategies to support food intake, such as snacks or special supplements"

Monitor:

- ✓ Food/meal intake
- ✓ Weight weekly
- ✓ Duration of NPO/clear fluid intake
- ✓ Hydration status
- ✓ Appetite

Strategies: Transitioning Malnourished Patients to Home

- **Educate** patients and families/friends on the importance of nutrition during and post hospitalization
- Include nutrition status and treatment prescription in **discharge plans** to ensure follow-through of treatment into the community
- Provide **specific guidance** around monitoring body weight and appetite and what to do if these continue to be poor at home

Summary

- Making a hospital “food aware” requires **a multi-level approach**.
- Potential **barriers** to food intake should be recognised.
- **Strategies** to address these barriers need to be implemented.
- Hospitals require a **culture** that supports the nutritional needs of patients.
- Becoming “food aware” in hospital is the **shared responsibility** between hospital staff, management, patients and their families.

Acknowledgements

These slides were created and approved by:

Heather Keller
Celia Laur
Bridget Davidson
The More-2-Eat Education Group*

* Includes input from the UK Need for Nutrition Education/Innovation Programme (NNEdPro) Group

Canadian Malnutrition Task Force™ | le Groupe de travail canadien sur la malnutrition™
Advancing Nutrition Care in Canada /Améliorer les soins nutritionnels au Canada

Canadian Nutrition Society
Société canadienne de nutrition

Canadian Frailty Network | Réseau canadien des soins aux personnes fragilisées

This research is funded by Canadian Frailty Network (known previously as Technology Evaluation in the Elderly Network, TVN), supported by Government of Canada through Networks of Centres of Excellence (NCE) Program

Canadian Malnutrition Task Force™ | le Groupe de travail canadien sur la malnutrition™
Advancing Nutrition Care in Canada /Améliorer les soins nutritionnels au Canada

References

Allard, J.P., Keller, H.H., Teterina, A. Jeejeebhoy, K.N., Laporte, M., Duerksen, D. et al. Factors associated with nutritional decline in hospitalised medical and surgical patients admitted for 7 d or more: a prospective cohort study. *BJN.* 2015, 114(10), 1612-1622.

Allard JP, Keller H, Jeejeebhoy KN, Laporte M, Duerksen D, Gramlich L, Payette H, Bernier P, Vesnaver E, Davidson B, Terterina A, Lou W. Malnutrition at hospital admission: contributors and impact on length of stay. A prospective cohort study from the Canadian Malnutrition Task Force. J Parenter Enteral Nutrition. 2016;40(4):487-97.

Duerksen DR, Keller HH, Vesnaver E, Laporte M, Jeejeebhoy K, Payette H, Gramlich L, Bernier P, Allard J. Nurses' perceptions regarding prevalence, detection, and causes of malnutrition in canadian hospitals: Results of a canadian malnutrition task force survey. *J Parenter Enteral Nutr*. 2016;40(1):100-6

Duerksen DR, Keller HH, Vesnaver E, Allard J, Bernier P, Gramlich L, Payette H, Laporte M, Jeejeebhoy K. Physicians' perceptions regarding the detection and management of malnutrition in canadian hospitals: Results of a canadian malnutrition task force survey. . *J Parenter Enteral Nutr*. 2015;39(4):410-7.

Keller H, Allard J, Vesnaver M, Laporte M, Gramlich L, Bernier P, et al. Barriers to food intake in acute care hospitals: A report of the Canadian Malnutrition Task Force. J Hum Nutr Diet. 2015;28(6):546-557.