Protected Mealtimes

(or *Assisted* Mealtimes?)

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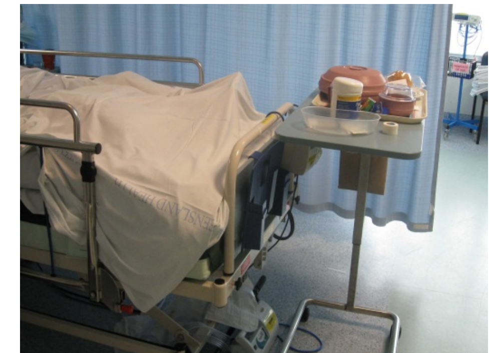
Mealtime care and poor intake

"Common"

- Interruptions:
  - 20-40% of meals interrupted[1-4]
    - 50% by nurses, 20% doctors
  - Study in 1991 (n=242)[5]
    - More patients ate poorly when interrupted (34% vs. 17%)
    - Only affected those with poor appetite
- Inadequate assistance:
  - 15-20%[2,3,6]
  - Higher plate waste (77% vs 15%, no *p* value)[6]

Complex:

- Competing priorities, diffusion of responsibility, perception of roles[7] etc.



[1]Xia & McCutcheon 2006, [2]Hickson 2011, [3] Huxtable 2013, [4]Young 2012, [5]Deutekom 1991, [6]Tsang 2008, [7]Ross 2011

Dedicated feeding assistant

- Healthcare assistant (n=592)[1]
  - No clinical or nutritional benefits
  - ? Implementation
- Dietetic assistant (n=318) [2]
  - +1400kJ/d, reduced mortality post-op + 4/12
  - Focus on supplement intake
- AIN (n=256) [3]
  - Increased adequacy of intake (21% vs 8%)
- Volunteer programs
  - limited evaluation[4]

Protected Mealtimes

- Implemented in 5% of wards[5]
- No change in intake, interruptions or assistance[6,7]
  - Except on pilot ward[7]
- Improved intake with "assistance" focus, despite no change in interruptions[3]

Protecting vs assisting?

[1] Hickson 2004, [2] Duncan 2006, [3] Young 2012, [4] Green 2011, [5] Agarwal 2010, [6] Hickson 2011, [7] Huxtable 2013

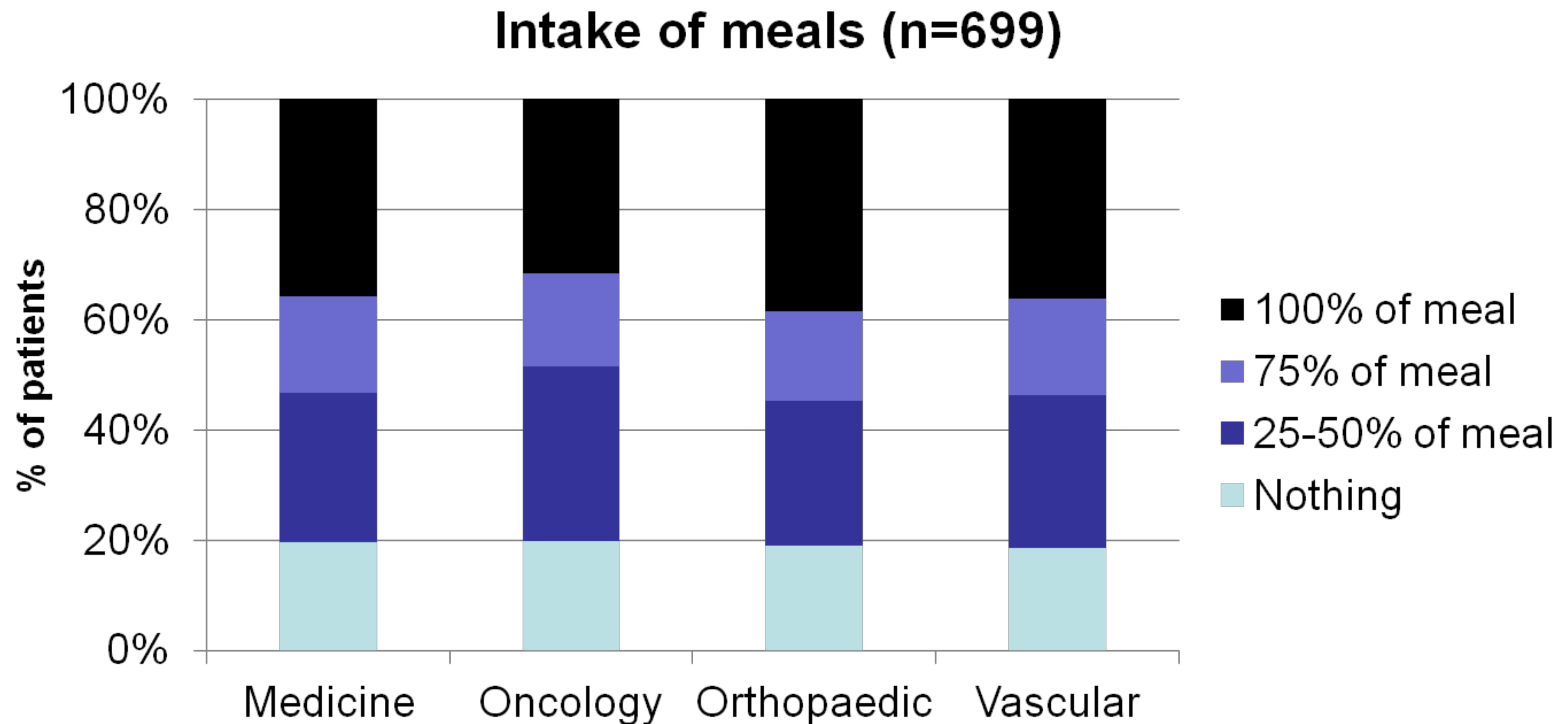
The EAT mealtime study

- Aimed to examine and compare mealtime practices and nutritional intake of patients across four units at RBWH
  - Medical
  - Oncology
  - Orthopaedics
  - Vascular surgery
- Data to be published soon…

Methods

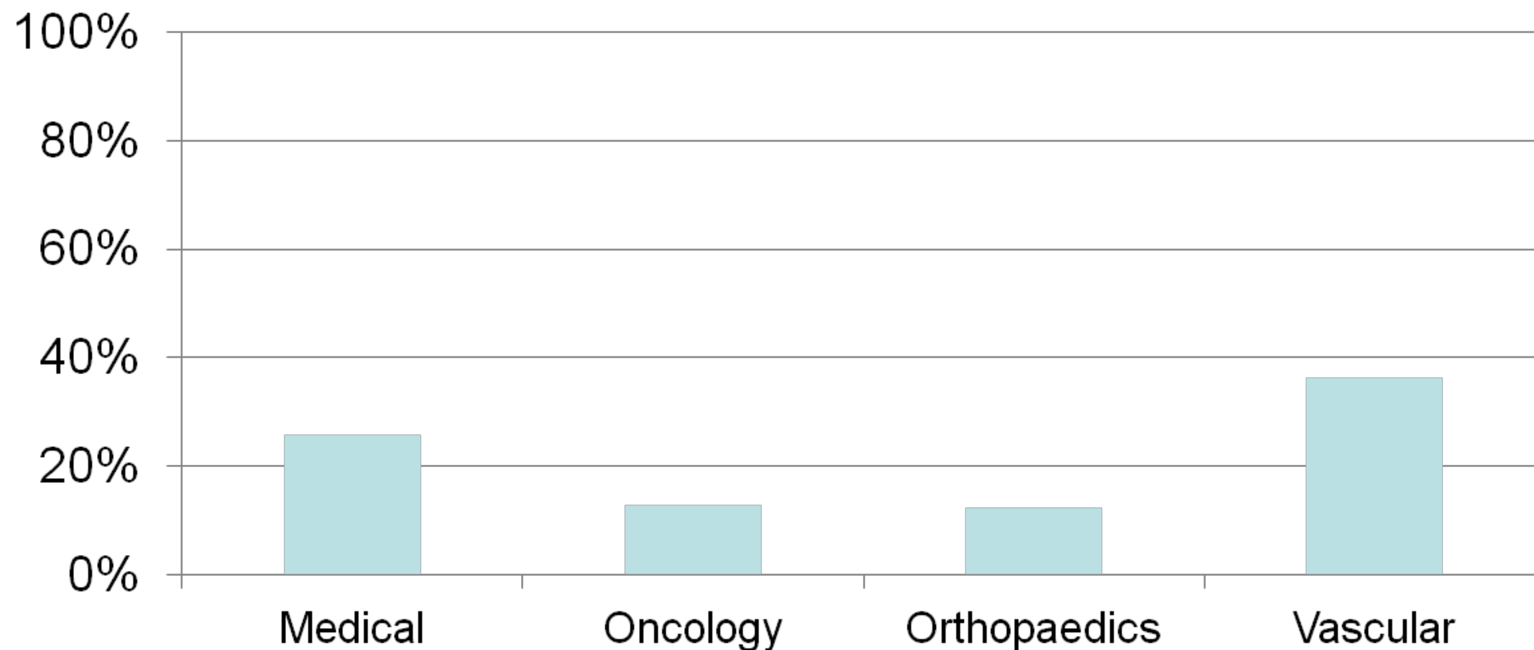
- Systematic meal observations (n=699)
  - 2 of each meal
  - 2 observers (dietitian ± nurse)
  - Same methods & observers across all wards
  - Ward nurses unaware
  - Exclude NBM, palliative
- Before meal
  - Positioning
    - Asleep, lying, sitting
- During meal
  - Assistance
    - When, who
  - Interruptions
- After meal
  - Intake of meal (0, 25, 50, 75, 100%)

Nutritional intake



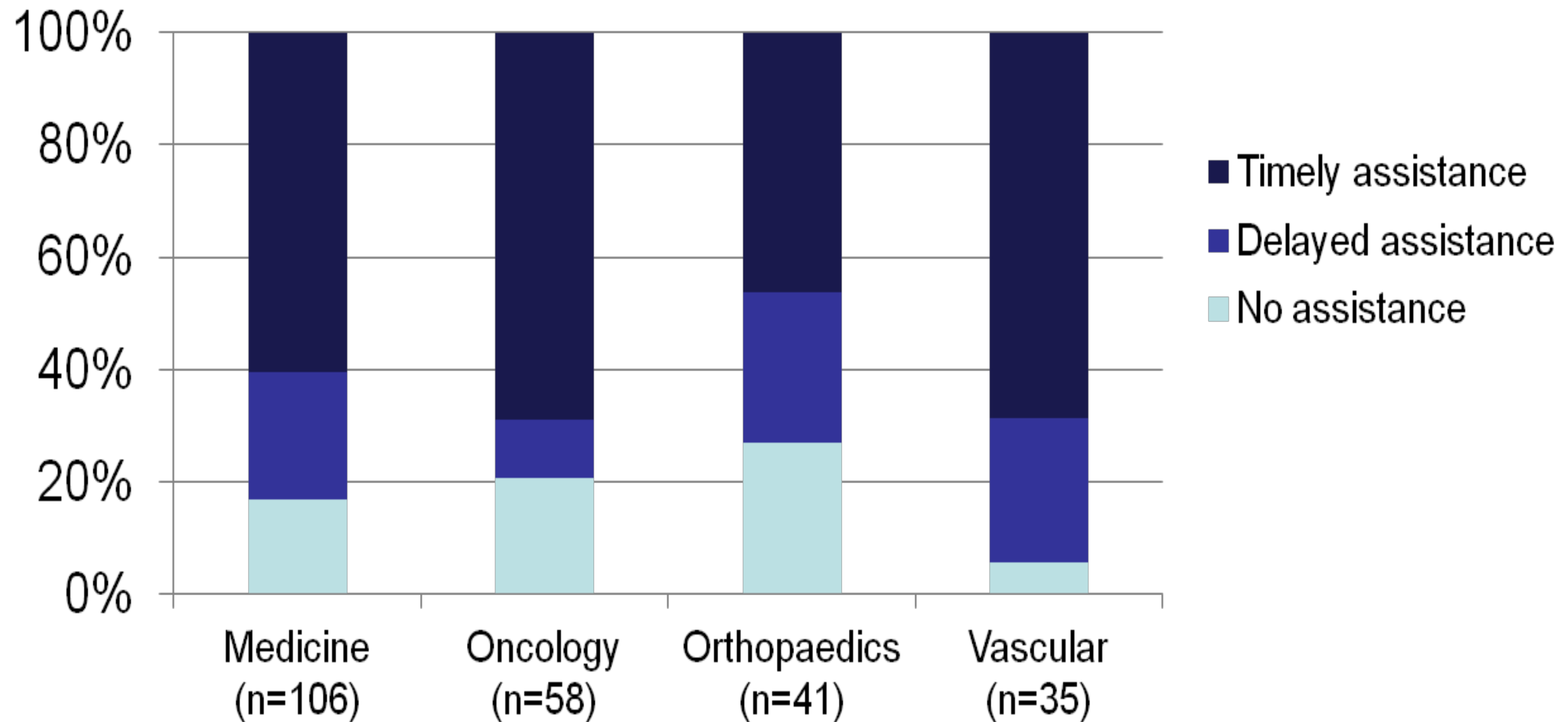
- 47% of patients ate ≤50% of their meal
- No difference in intake between wards (*p*=0.751)

Mealtime barriers



- Most interruptions by nurses, except in vascular (dr rounds)
- Meal positioning
  - 33% of patients were lying bed when meal was delivered
  - Poor positioning highest in oncology (57%), lowest in vascular (7%)

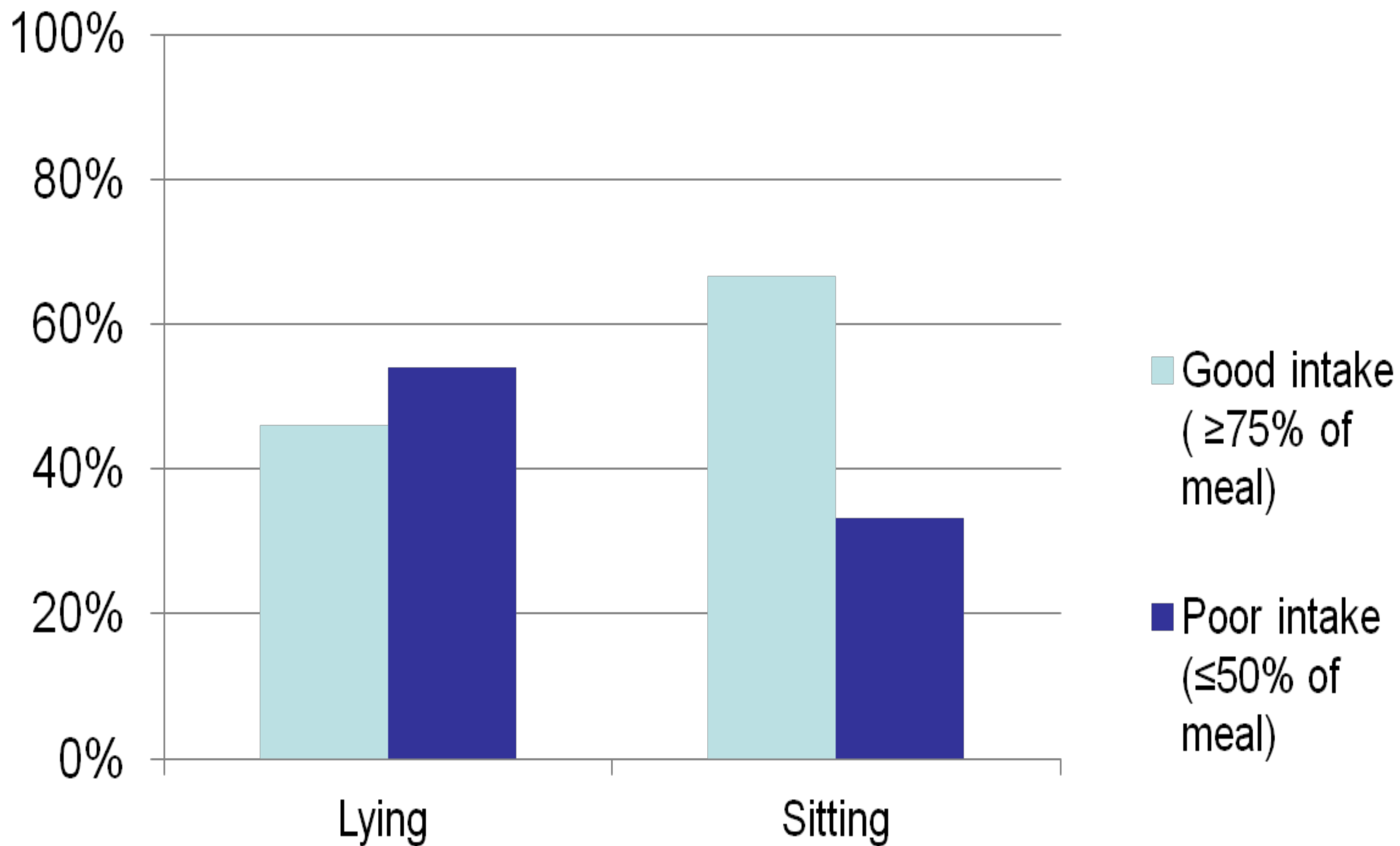
Mealtime assistance (40%)



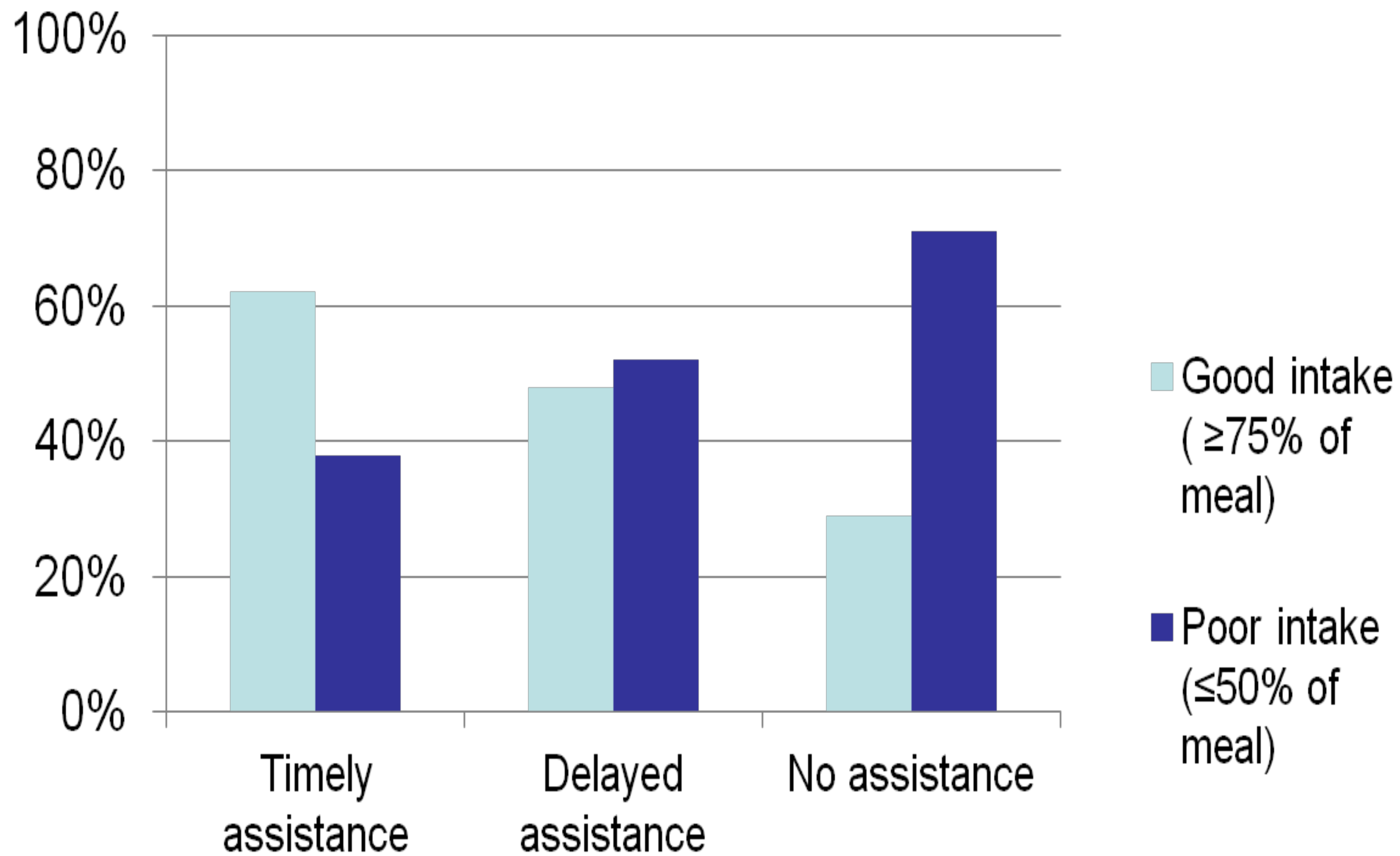
- Varied acc meals: bf (47%), lunch (77%), dinner (67%)
- Most assistance from nurses (50%), visitors (bf 5%, lunch 38%, dinner 24%), AINs (5%), DAs (2%)

Relationship between positioning and intake

p<0.001

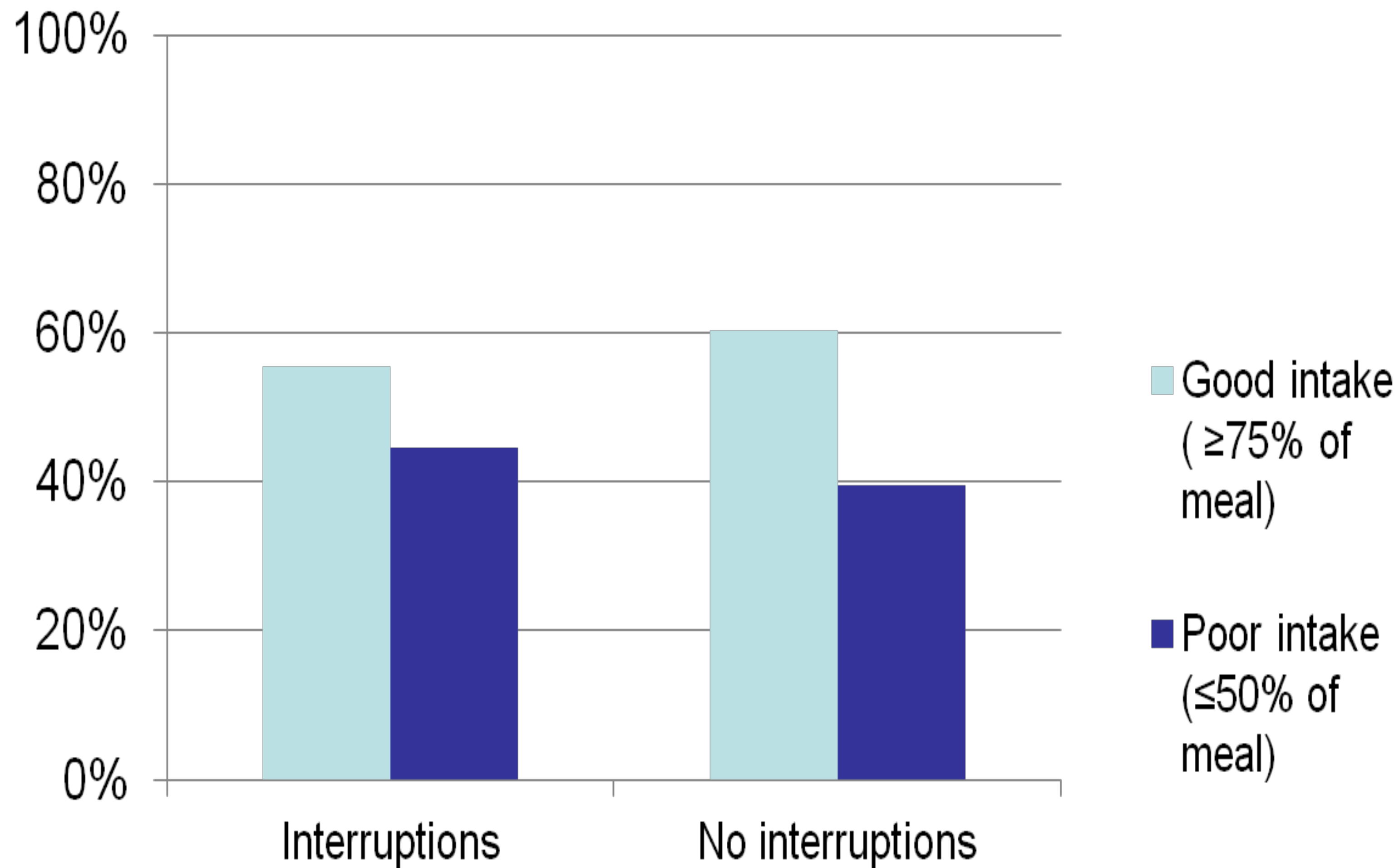


p=0.001



Relationship between interruptions and intake

p=0.316



In summary…

- Confirms poor intake of hospital patients
  - Across all wards, across all meals
  - High numbers of patients who ate nothing
- Mealtime assistance levels vary across wards ?culture ?staffing ?patient
- Receiving assistance when it is needed is assoc with better food intake
- Mealtime interruptions are common and context-specific
  - But may not affect intake?

What does this mean?

- Just “protecting” the mealtime may not improve nutritional intake
- “Assisted mealtimes” focus may produce better results
  - Collaborative
  - Comprehensive ax of problem
  - Multifaceted solutions
  - Assistant workforce to support (not replace) nurses
  - Modelling by dietitians and other champions
  - Time, persistence

What about Red Trays?

- Suggested as a solution to hospital malnutrition in 2003[1]
  - Campaign endorsed by RCN
  - Widespread implementation through the UK
  - No evaluation of impact on outcomes
  - Mixed commentary from within the nursing profession
    - "Erode essential nursing skills"
    - Band aid solution

[1]Bradley & Rees 2003, photo: gvhealth.org.au

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