Green Healthcare Programme

Sustainability in Healthcare Seminar

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Presentation Overview

- Outline of Programme
  - History
  - Number of participating facilities
  - Key findings
- Overall savings to date
- Green Healthcare Website & Network

Outline of Programme

- 2009: Trial project involving 3 hospitals in the Cork Region
- 2010: Nationwide programme
- 2011: Limited number of additional hospitals
- Total: 22 Healthcare facilities 40% of beds
  - Acute & PCCC - community type

Outline of Programme – work undertaken

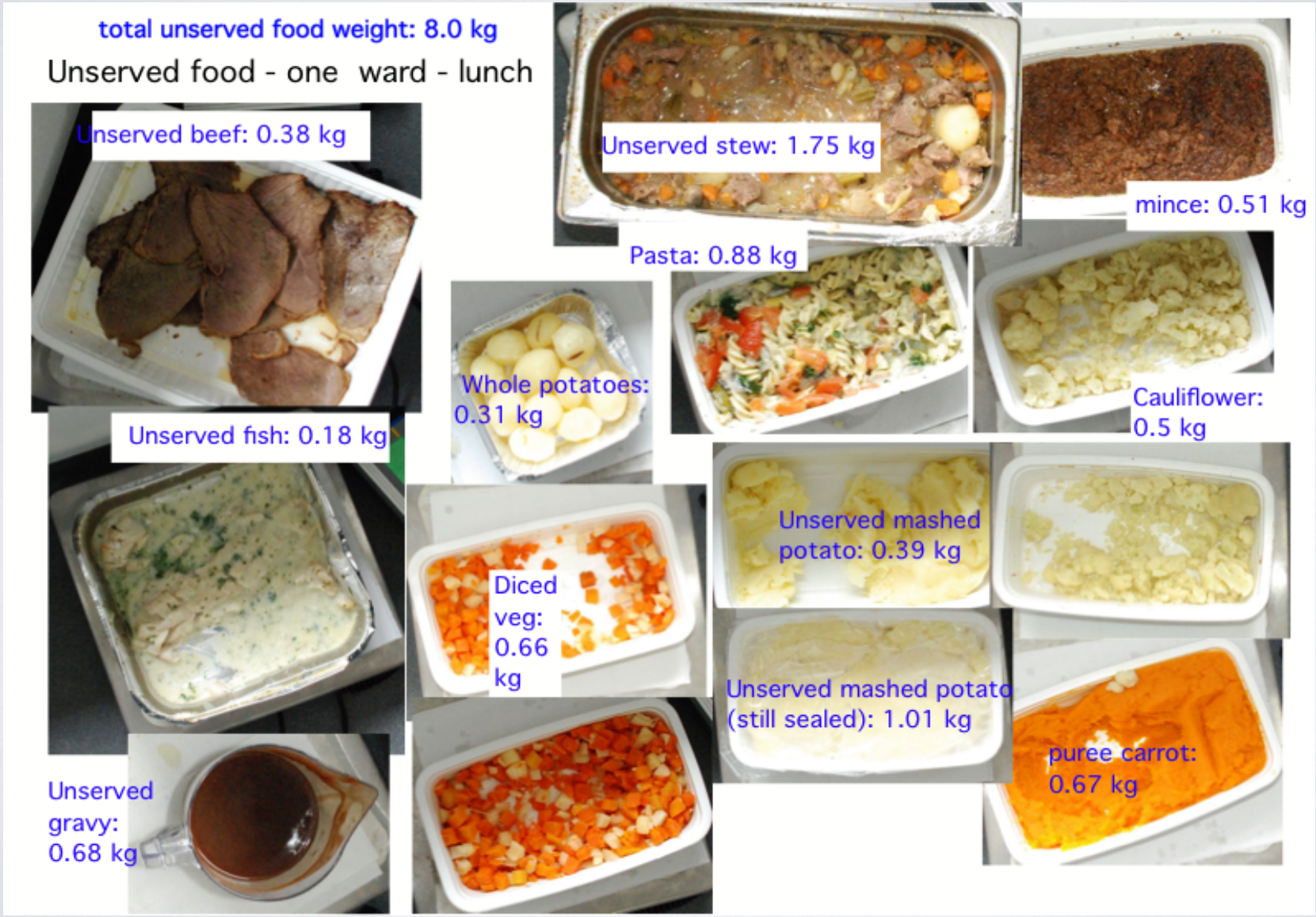
- Waste Surveys
  - General landfill waste
  - Clinical risk waste
  - Food waste
- Water & Energy Surveys
- Data gathered from hospital:
  - Annual waste contractor data, bed day numbers and disposal costs
- Detailed report outlining findings of survey and recommendations provided to hospital
- Continue to work with the hospital, drawing up work programme, and providing assistance in implementing key recommndations

Key findings

FOOD WASTE

- *Area with the greatest potential for waste reduction*
- The food waste Regulations have made many facilities aware of the quantities of food waste being generated
- Food waste divided into different types of waste:
  - Un-served food (food that has been prepared but not served)
  - Untouched food (plated food provided to patients but not eaten in any part)
  - Un-eaten food (food waste from plates that was uneaten)
  - Un-used condiments (butters, jams, etc.)

FOOD PREPARED - NOT SERVED



Key findings

- The main areas to be considered for reduction in food waste are:
  - Food prepared but not served
  - Communication and awareness within the whole system
  - Segregation of food waste from landfill waste bags
  - Portion sizes (meat portions, amounts on plates, issuing of bread)
  - Practices in relation to the issuing of condiments.

……*always scope for reduction of food waste within existing system and staffing - without compromising nutrition*

1 hospital – *actual* savings to date

- 42% reduction in food waste from patient trays
- €20,000 actually saved in 2 months following changes - projected savings €120,000 p.a.
- Changes:
  - Reduced meat portion size
  - Reduced vegetable & potato scoop size
  - Clarification of discard procedures
  - Changes in bread & condiment provision
  - No reduction in services; no complaints

Key findings

CLINICAL WASTE

Clinical risk waste is waste from healthcare facilities, which poses a risk due to its potential infectious nature and includes wastes such as sharps, anatomical waste, blood, and items contaminated with blood or other bodily fluids.

- Cost of risk waste disposal significantly higher than general waste - €1000 per tonne vs €150 per tonne - *Minimise non-risk waste that is put into this stream*
- Survey grouped materials into 3 categories:
  - Non-risk – packaging, paper, etc. - 8% to 30%
  - Potential non-risk - equipment wrapping, non-contaminated medical material - 11% to 42%
  - Possibly risk - contaminated material

Key findings

CLINICAL WASTE

- Facilities tend to be very conservative in classifying waste as 'risk'.
- Questions raised:
  - Number of bags generated versus no of isolation rooms
  - Location of yellow bins
  - Improved guidelines & training may be required, especially in university hospital situations with changeovers every six months.

Non-risk waste in RISK BAGS

Key findings

GENERAL WASTE

- All hospitals segregate recyclables…some only segregating cardboard
- Recyclable content in general waste stream:
  - Facilities with mixed dry recyclable (MDR) bags: 5% to 24%
  - Facilities with no MDR bags: 8% to 32%
- Materials observed in the largest quantities are:
  - Tissue
  - Food – should be segregated
  - Incontinence wear / nappies
- Use of single use items (& packaging) is increasing.
- A high level of composite packaging was observed - this may be suitable for recycling or heat recovery.

RECYCLABLE waste in GENERAL BAGS

Key findings - water

- **Water flow** surveys were carried out in 3 healthcare facilities in 2010.
- The findings thus far regarding water are:
  - Fixtures with high flow rates e.g. taps, possible scope for water reduction
  - Facilities examined had up to 50% of taps with flowrates above 'good practice' values.
  - It is necessary to take account of legionella prevention requirements, e.g. using non-spray aerators in taps when reducing flows.
- Quantifying potential savings is somewhat difficult since the:
  - Frequency and duration of use of various equipment is not known and
  - Meter readings usually tend to be based on billed amounts only.
  - Submetering of different building and sections in the hospital is limited.

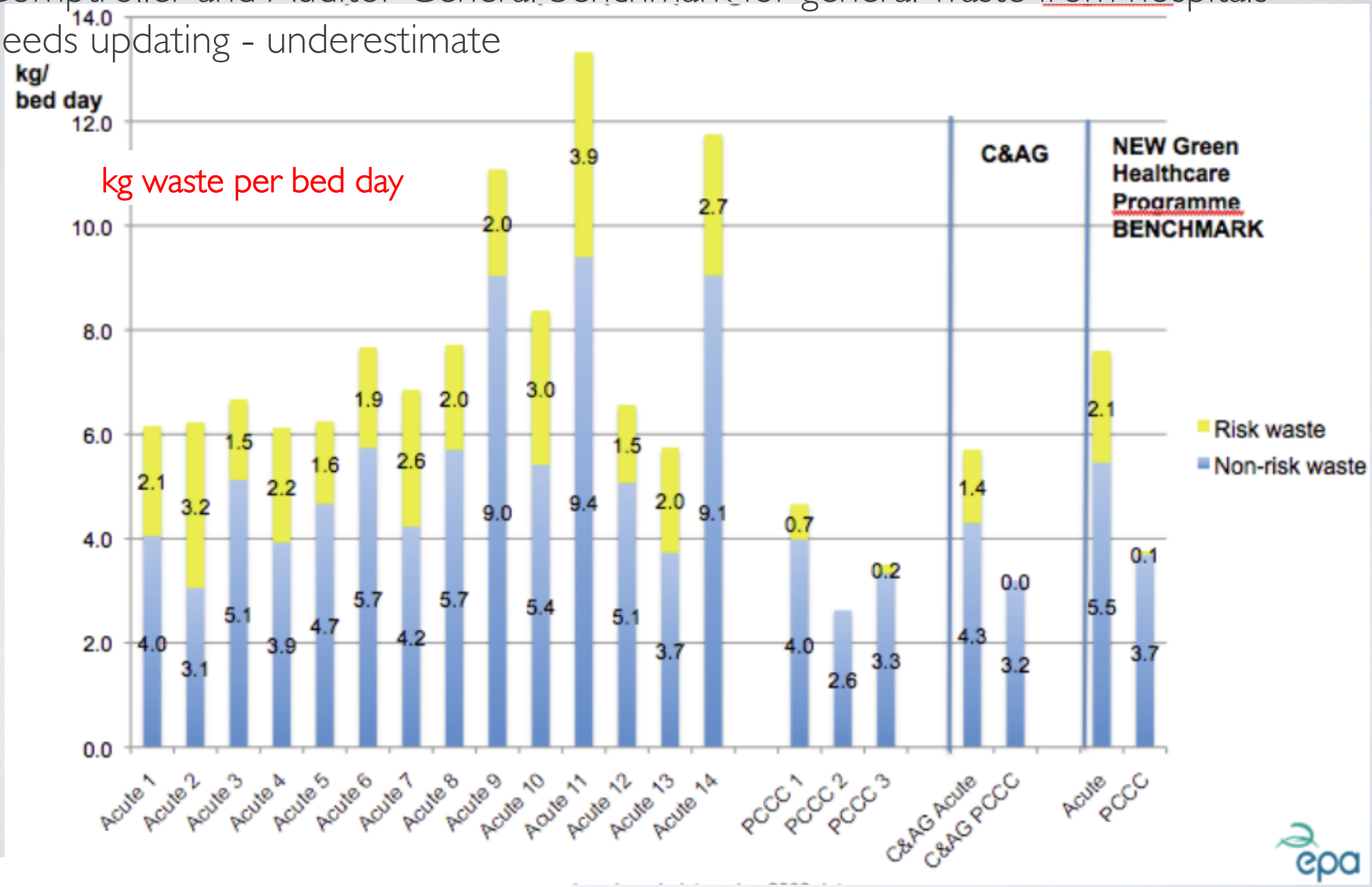
An initial estimate of a potential of €80,000 saving

Key findings - energy

- Saturday morning "out-of-hours" energy survey in 1 hospital (~ 1000 staff)
- Unoccupied areas: offices, week-day clinics, week-day labs
- Aim: identify equipment unnecessarily on/stand-by: lights, computers, printers, medical equipment, lab equipment
- Potential savings identified: min €10,000 per annum

Key findings – waste benchmark

- Comptroller and Auditor General benchmark for general waste from hospitals needs updating - underestimate



Summary of cost savings identified to date

Total potential annual savings identified in 16 of the participating healthcare facilities: **€1.6 million**

- Food prepared but not consumed: €1,075,000
- Unopened condiments: €210,000
- Recyclables in general waste: €110,000 - €170,000
- Non-risk items in clinical waste: €255,000 - €450,000

If potential savings are scaled up nationally for all healthcare facilities: €4.1 million

Green Healthcare Website

www.greenhealthcareprogramme.ie

Green Healthcare Network

- Basecamp Project Management System
- Very popular online networking, collaboration application
- Used widely by CTC on its projects for various stakeholders and partners
- Can discuss issues privately, upload documents, highlight events, contact people – one to one or in a group
- Can create new discussions, new groups etc. as required
- Access only to members of the network, completely confidential
- Facilitated and managed by CTC – we will set everybody up on the system and host it