Royal College of Nursing

Freedom of Information Follow up Report on Management of Waste in the NHS

POLICY AND POSITION STATEMENTS

Royal College of Nursing

Acknowledgements

RCN lead: Rose Gallagher

The RCN wishes to thank the contribution of the following the development of this report:

FOI respondents

Chartered Institute of Waste Managers

This publication is due for review in February 2021. To provide feedback on its contents or on your experience of using the publication, please email **publications.feedback@rcn.org.uk**

Publication

This is an RCN position statement.

Description

This publication describes the results of the 2017 Freedom of information survey request on waste management in the NHS.

Publication date: February 2018 Review date: February 2021.

The Nine Quality Standards

This publication has met the nine quality standards of the quality framework for RCN professional publications. For more information, or to request further details on how the nine quality standards have been met in relation to this particular professional publication, please contact **publications.feedback@rcn.org.uk**

Evaluation

The authors would value any feedback you have about this publication. Please contact **publications.feedback@rcn.org.uk** clearly stating which publication you are commenting on.

Published by the Royal College of Nursing, 20 Cavendish Square, London, W1G 0RN

Contents

Executive summary

The role of nurses in the delivery of health and care services makes them by default the staff group that produces the greatest amount of waste. However, that positioning means they also have a major part to play in its reduction. They are responsible for the correct identification and segregation of waste they produce. Nurses have a significant role in supporting their employing organisation to comply with relevant waste regulations, financial savings and reductions in carbon equivalent omissions. They do, however, require support, and in terms of local expertise on waste management, information and appropriate systems in place to help then correctly manage waste in all care settings.

Reducing unwarranted variation (in treatments and outcomes) and improving productivity are a priority for the NHS, and directly connect to how it creates and handles waste. The RCN Freedom of Information (FOI) survey was undertaken in 2017 to provide information on the management of three common waste streams for bagged waste (municipal, offensive and infectious waste) and where possible, to compare with the first RCN FOI report in 2011 to identify what changes may have occurred. These three categories of waste are predominantly generated by nursing staff and have been selected as a starting point to initiate debate on the amounts and costs of these bagged wastes commonly managed in the NHS in England, and to highlight potential changes in waste management that could result in reduced environmental impact and financial savings for the NHS.

There have been significant transformational and organisational changes in NHS organisations across the UK between 2011 and 2017 which have impacted on responses and on the ability to compare data between these two surveys. Nevertheless responses to the surveys have identified key areas for further scrutiny and action. This report also presents the frequency reporting of waste disposal by organisation, including reporting at board level.

Formulating an innovative strategy on waste management that can have impact at national, regional and organisational level could deliver significant improvements, foster a culture of engagement and create waste management financial intelligence data to drive cost savings to the NHS as a whole and individual NHS trusts.

Report highlights

- 227 FOI requests were sent to NHS trusts in England with a response rate of 69%.
- A total of 195,734 tonnes of bagged waste for the three categories was produced by participating organisations in England during 2015/16 at a cost of approximately £33.3 million.
- 59.4% of the waste recorded was classified as municipal: 32.8% was classified as infectious. Only 7.7% was classified as offensive waste.
- Analysis of the FOI responses shows that improved classification of bagged waste offers potential savings to the NHS in England, for example:
  - a 20% reduction in bagged infectious waste reclassified correctly as municipal waste could represent a potential year on year saving to the NHS of approximately £4,781,000
  - a 50% reduction in bagged infectious waste reclassified correctly as offensive waste could represent a potential year-on-year saving to the NHS of approximately £2,937,000.
- Reporting of waste at trust board level remains low, with 11% responding that no reporting in place.

Key recommendations for the NHS in England

- NHSi (NHS Improvement) should collect, compare and publish data on NHS trusts' waste management systems, aligned against Sustainable Development Management Plans (SDMP), to enable local improvements.
- Building on the work of Lord Carter's report *Operational productivity and performance in English NHS acute hospitals: Unwarranted variation* (HMSO, 2016), NHSi should investigate apparent variations in waste types generated by all NHS trusts and support improvements to reduce variations in assessment of waste and associated costs.

- The categorisation and reporting of waste currently used in the Estates Return Information Collection (ERIC) should be reviewed.
- NHS England, through commissioning processes, should ensure all NHS providers utilise the expertise of a suitably qualified and experienced waste manager to support nursing teams and departments to create quality assured sustainable management of various waste streams.
- The potential opportunity to manage waste on a locality or STP (sustainability and transformation partnerships) footprint should be investigated to identify potential service, resource and financial savings.
- Building on the work of the NHS Clinical Evaluation Team, focus the importance of procurement criteria for the selection of consumables equally on quality and safety *and* the ability to dispose of packaging or used items. Category Tower Service Providers (organisations providing procurement services to the NHS in England) should publish an annual report on the impact of procurement decisions to waste and carbon equivalent reductions.

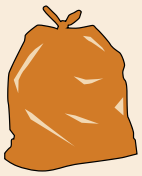
Introduction

This follow-up report presents findings of a Freedom of Information (FOI) survey on waste management by NHS trusts in England. The survey was conducted by the Royal College of Nursing in spring 2017. The management of waste requires attention to further highlight the need for a comprehensive system to comply with legislative requirements from reporting and monitoring on waste to disposal. It must also address financial implications and environmental benefits.

The 2017 FOI survey repeated questions asked in 2011 and requested data for the periods 2014/15 and 2015/16. For the purpose of this report data is presented for 2009/10 and 2015/16 due to the limitations of data retuned, and the impact of this on comparisons with the previous report (RCN, 2011). This report focuses on the variation in amounts of common bagged waste categories produced in tonnes, and highlights associated costs to treat or dispose of the waste. The three categories of bagged waste are: municipal waste (non-hazardous), offensive waste (non-hazardous) and infectious waste (hazardous waste).

The purpose of this report is to ignite discussion and debate on how waste is managed in NHS care in England, and prompt a focus on variation of costs associated with this, to identify where better use of data could release savings to the NHS.

These three categories of waste in this report are defined as:

Category of waste and colour of bag	Waste description and disposal/treatment type	Examples
Infectious (Yellow bag) 	Infectious waste which must be sent for incineration at a suitably authorised facility. It must not be sent for alternative treatment.	Waste which is classified as infectious (contaminated with bodily fluids where the assessment process leads you to believe the waste poses a potential infection risk, and there are also medicines or chemicals present). Examples are: • infectious waste contaminated with chemicals • chemically contaminated samples and diagnostic kits • infectious waste contaminated with medicines • laboratory specimens.
Infectious (Orange bag) 	Infectious waste which can be sent for alternative treatment to render it safe prior to disposal.	Waste which is classified as infectious (contaminated with bodily fluids where the assessment process leads you to believe the waste poses a potential infection risk), such as: • dressings • continence aids • bandages • protective clothing (for example, gloves or aprons).
Municipal and Recycling waste (Black bag) 	Domestic/municipal waste to be sent to energy from waste facilities or landfill.	Items which you would find in the normal household waste stream, such as: • food waste • tissues.
Offensive (Yellow with black stripe bag) 	Offensive/hygiene waste which may be sent for energy recovery at energy from waste facilities. These wastes can also be sent to landfill if no other recovery or recycling option is available.	Health care waste classified as non-hazardous, ie where the assessment process leads you to believe the waste does not pose an infection risk. These can be items contaminated with bodily fluids such as: • stoma or catheter bags • incontinence pads • hygiene waste • gloves, aprons, maternity waste where no infection risk exists • blood contaminated items from screened community.

Note:

Compared to 2011 there have been significant changes in the landscape of provider organisations in England where new large integrated acute care and community care NHS trusts have emerged through structured partnerships. This means that direct comparison with the 2011 survey data is not possible.

Respondents

Overview of respondents

This chapter presents a brief overview of the numbers and types of organisations that participated in the 2017 England only survey.

The total number of FOI requests made was 227. A total of 156 organisations participated in the survey partially or fully, representing an overall 69% response rate.

Table 1: Total number of trusts responses 2017 for England

England	2017	
Total number of FOI requests	227	
Total number of responses	156	69%

Source: RCN Survey 2017

Trusts that did not participate identified commercial sensitivity and duplication of available NHS Hospital Estates and Facilities Statistics (ERIC) data as their reason for not responding.

Types of respondents

The organisations that replied to the survey are a diverse range of NHS trusts. The following charts show the responses from the different types of organisations.

Table 2: Comparison of responding organisations per category 2009/10 and 2015/6 (England only)

Types	2009/10	2015/16
Acute trusts	175	96
Primary care	75	0
Care trust	1	0
Mental health trusts	4	21
Community trusts	N/A	15
Integrated acute and community trusts	N/A	11
Integrated mental health and community trusts	N/A	13
Others	8	0
Total	263	156

Source: RCN Survey 2011, 2017

Response by participating organisations

Table 3 illustrates the level of responses to the FOI by organisation classification.

Table 3: Responses – all types level of reporting full, partial, or none

Responses – all types of provider organisations				
Types of organisations	2017			
	Full	Partial	None	Response – full or partial
All	81	75	71	69%
Acute	59	37	42	70%
Community	6	9	8	65%
Mental health	4	17	12	64%
Community and acute	6	5	3	79%
Community and mental health	6	7	6	68%

Source: RCN Survey 2017

Waste

Quantity of waste produced

This section of the report presents the amount of bagged municipal waste (non-hazardous), offensive waste (non-hazardous) and infectious waste (hazardous waste) produced by responding NHS trusts in 2009/10 and 2015/16.

Total overall waste reported

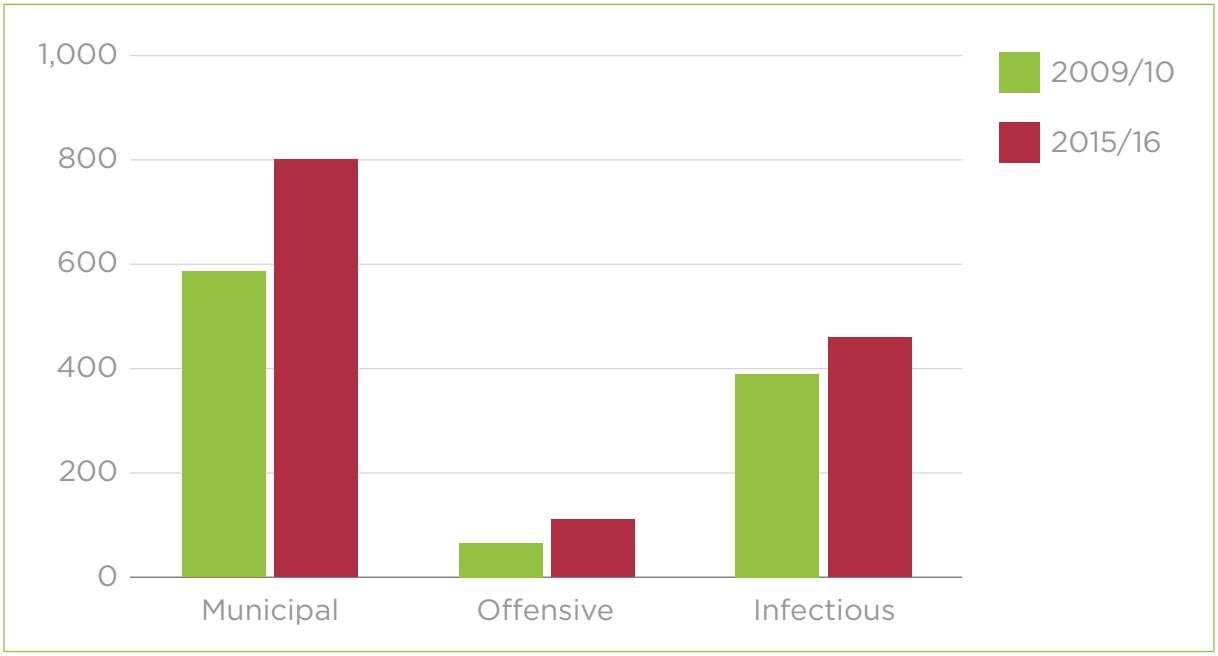
A total of 185,233 tonnes of waste were reported in England by participating organisations for the period 2015/16. This represents 69% of all NHS trusts currently. Of this total amount, municipal waste represented 110,103 tonnes (59%), infectious waste recorded 60,700 tonnes (33%) and offensive waste total was 14,350 tonnes (8%).

Table 4: Total waste reported in England 2009/10 to 2015/16 in tonnes

Bagged waste category	2009/10	% of total	2015/16	% of total
Municipal (residual and recycling)	129,852	58.1%	110,103	59.4%
Offensive	3,312	1.4%	14,350	7.7%
Infectious				
(Orange and yellow)	90,304	40.4%	60,780	32.8%
Total	223,470	100%	185,233	100%

Source: RCN survey 2011, 2017

Figure 1: Average total weights (tonnes) of bagged waste produced per type and trust



Source: RCN Survey 2011, 2017

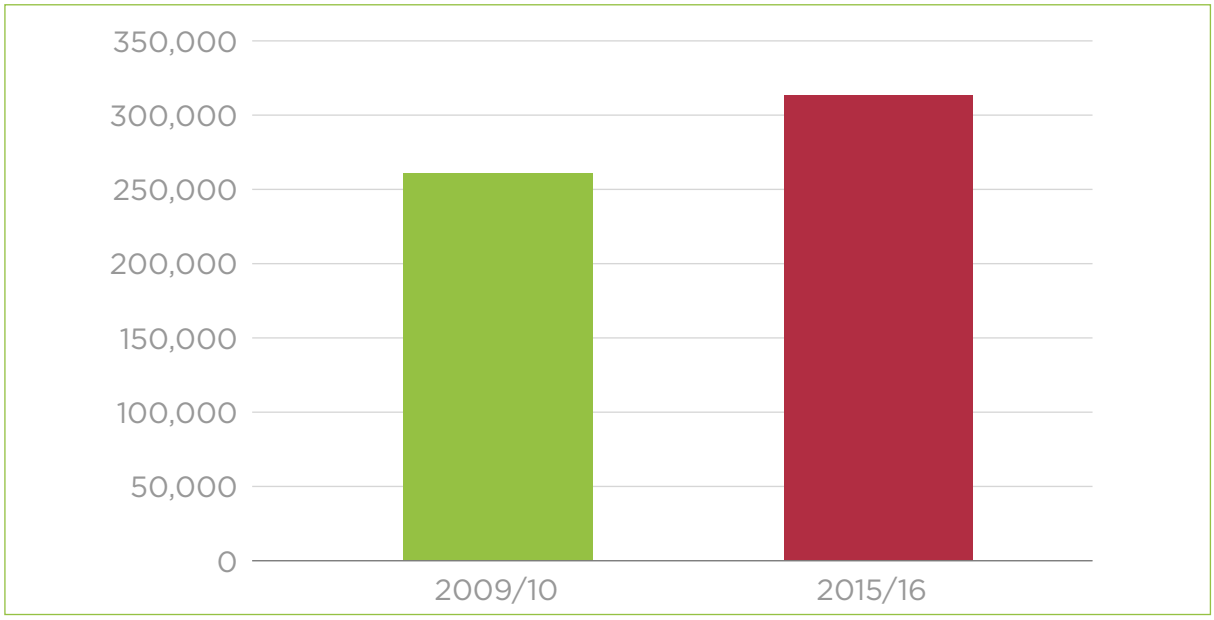
Costs of waste collection and disposal

This section presents costs of collection, treatment and disposal (overall costs) of the waste as reported by respondents. A calculation of cost per tonne has been estimated to enable comparison of costs between the categories of waste.

The total cost of waste reported by 69% of NHS Trusts was £33.3 million in 2015/16. The average total spend per trust appears to have steadily increased from 2009/10 to 2015/16. In the consecutive figures there is a breakdown of the waste average spend per municipal, infectious and offensive waste categories.

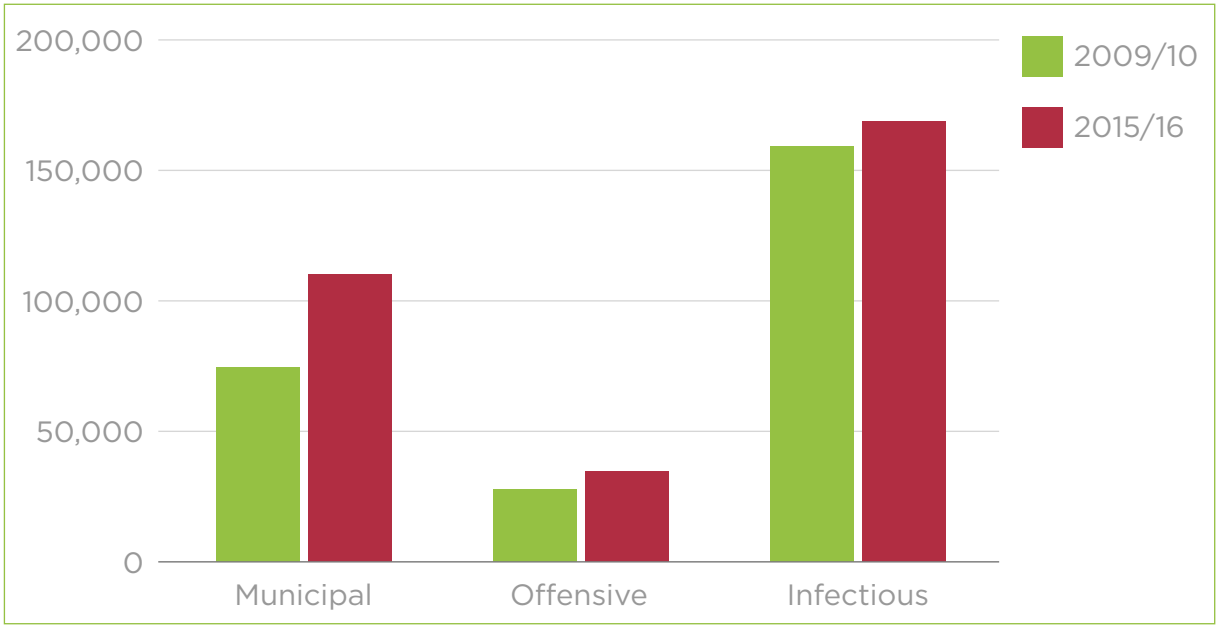
Note: FOI responses were used to calculate costs of waste below.

Figure 2: Average total spend (£) per trust for the three categories of bagged waste



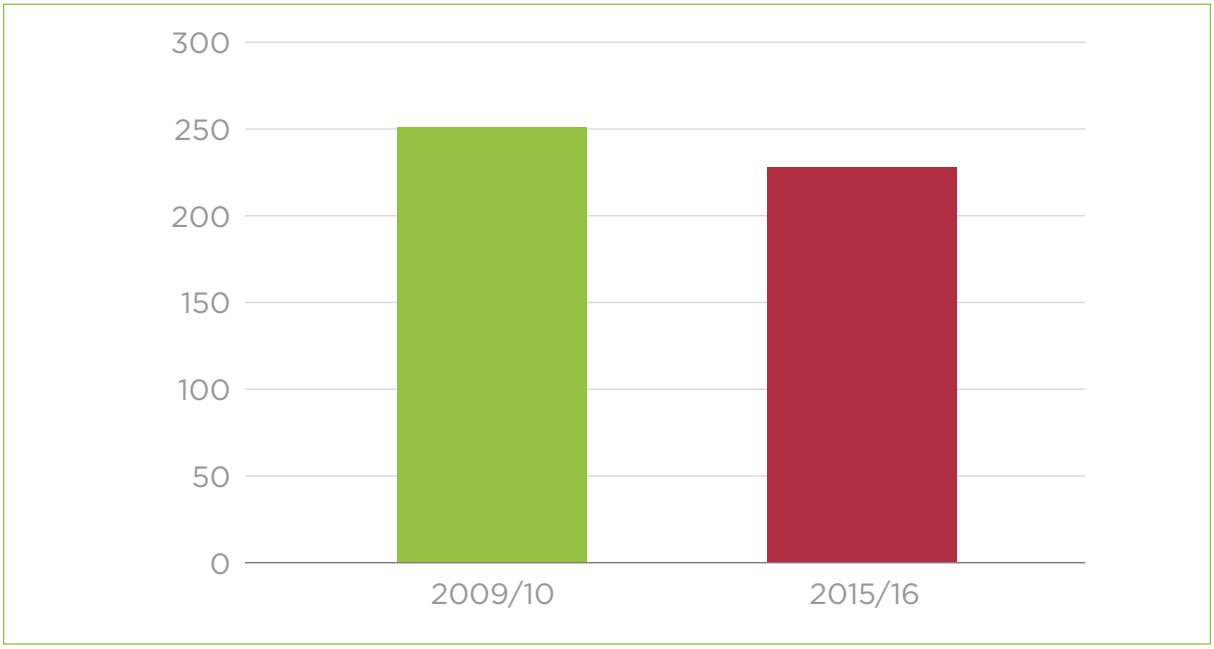
Source: RCN Survey 2011, 2017

Figure 3: Average total spend (£) per trust by type



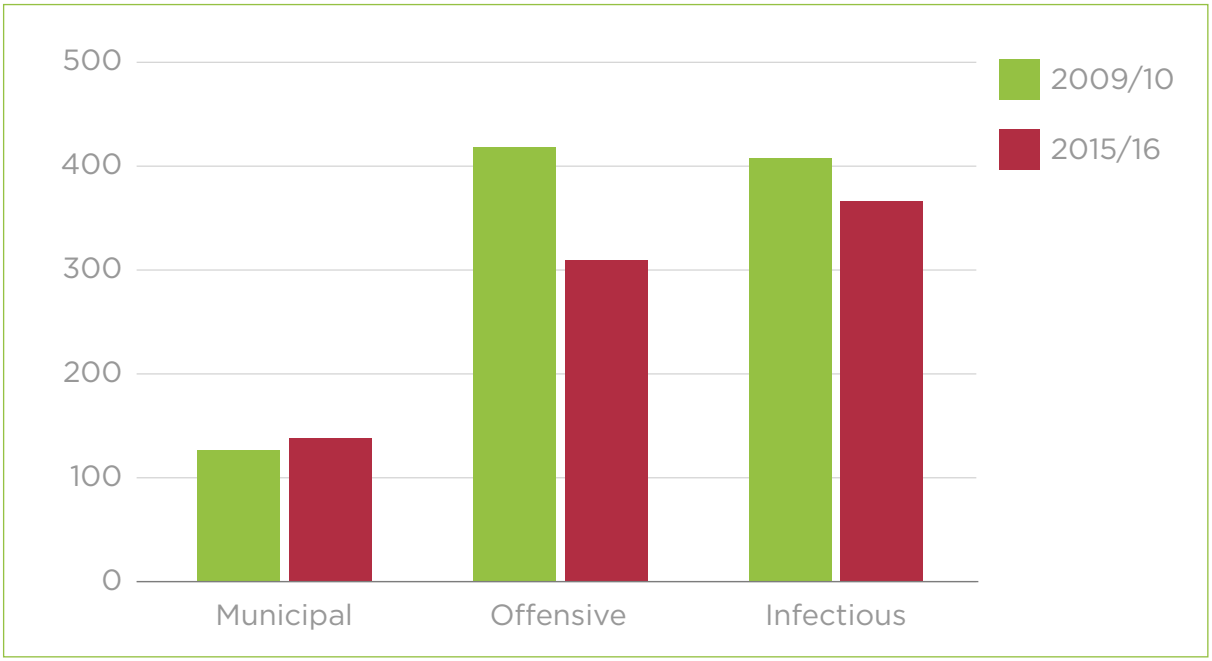
Source: RCN Survey 2011, 2017

Figure 4: average total cost (£) per tonne per trust



Note: calculations identified from FOI responses
Source: RCN Survey 2011, 2017

Figure 5: average total cost (£) per tonne per trust by type



Source: RCN Survey 2017

Range in cost for waste disposal

The following table presents the range of costs per tonne reported by respondents for 2015-16 (England only).

All waste streams demonstrate an increase in price per tonne, particularly infectious waste.

Table 5: Range of costs per tonne per type (2015/16)

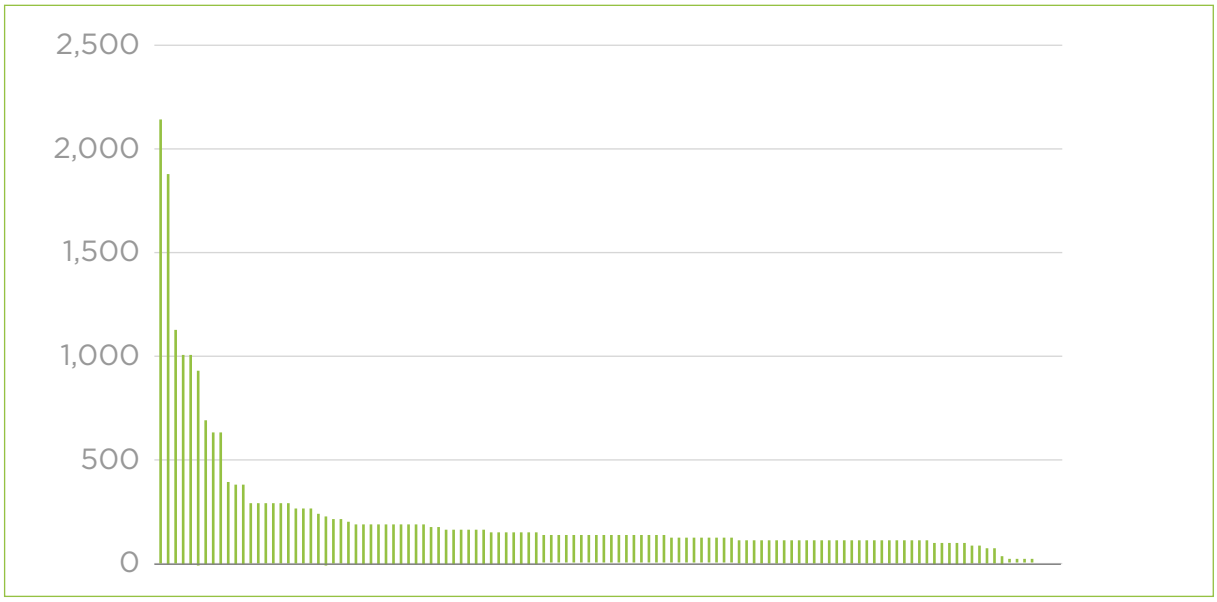
Cost per tonne	Municipal (residual)	Municipal (recycling)	Offensive	Infectious (orange)	Infectious (yellow)
Highest	£2,138	£2,356	£3,625	£5,000	£21,937
Lowest	£0.16	£12.30	£130	£26.30	£32.40
Median	£142	£114	£241	£337	£475

Source: RCN Survey 2017

In the following figures the individual trust's cost per tonne for the different types of waste are presented as reported by respondents. Further detailed analysis comparing volumes of waste with costs was not possible.

Municipal residual waste

Figure 6: Municipal residual waste, range of costs (£) reported by trusts per tonne per type

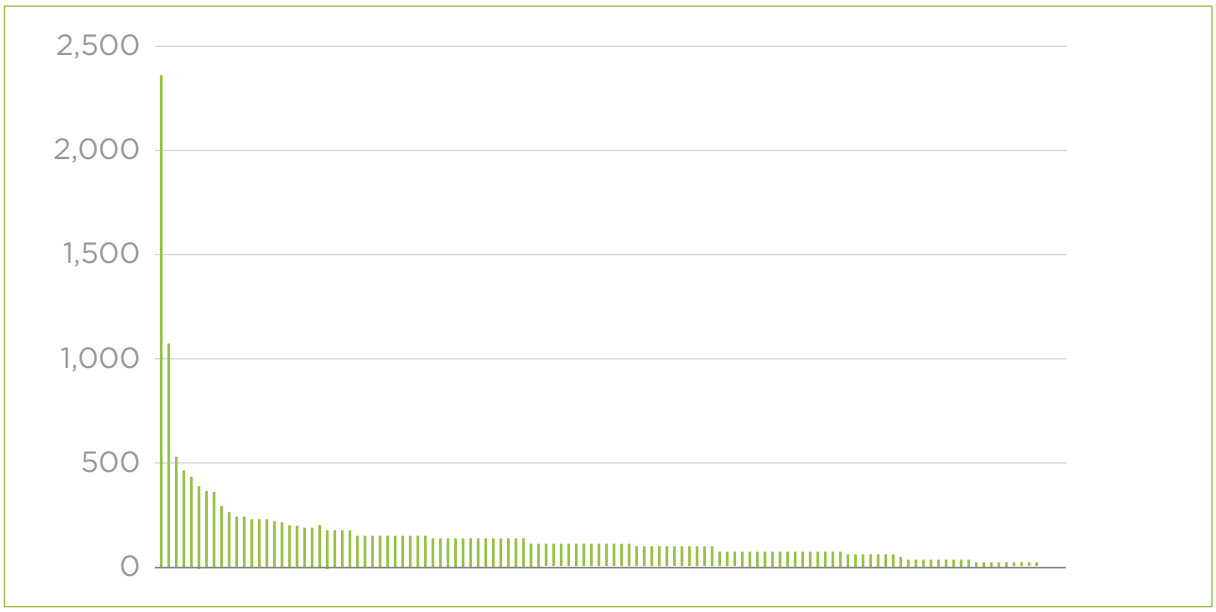


Source: RCN survey 2017

The variation in costs ranged from £2,138 to as low as under £100 per tonne.

Municipal recycling waste

Figure 7: Municipal recycling waste, range of costs (£) reported by trusts per tonne per type

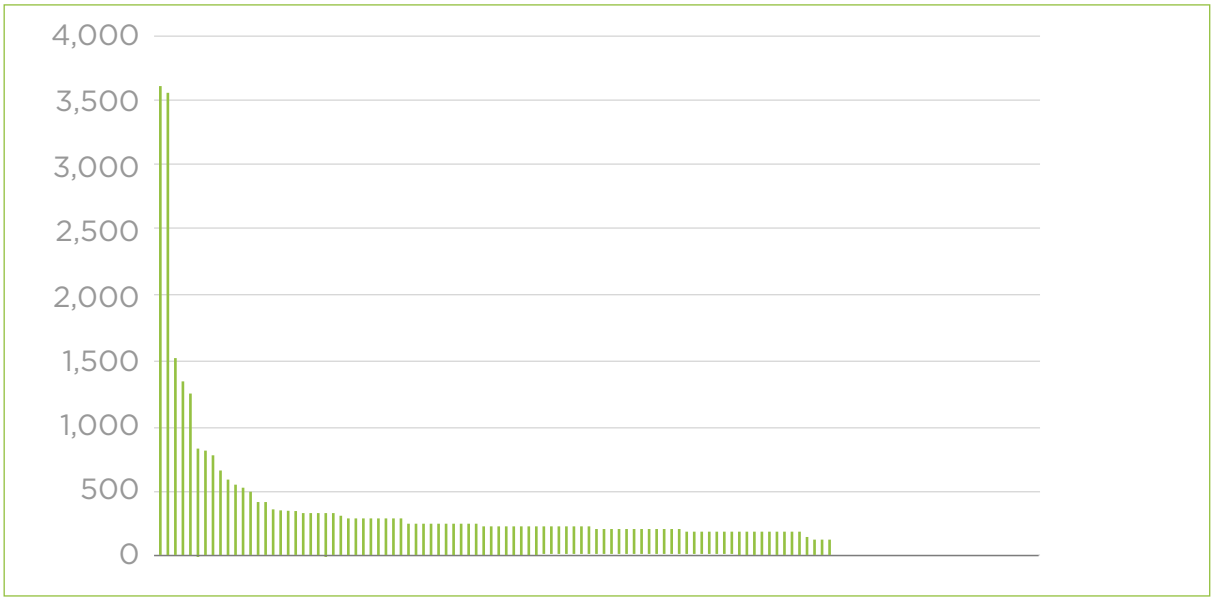


Source: RCN Survey 2017

The variation in costs ranged from £2,356 to as low as under £100 per tonne.

Offensive waste

Figure 8: Offensive waste, range of costs reported by trusts per tonne per type

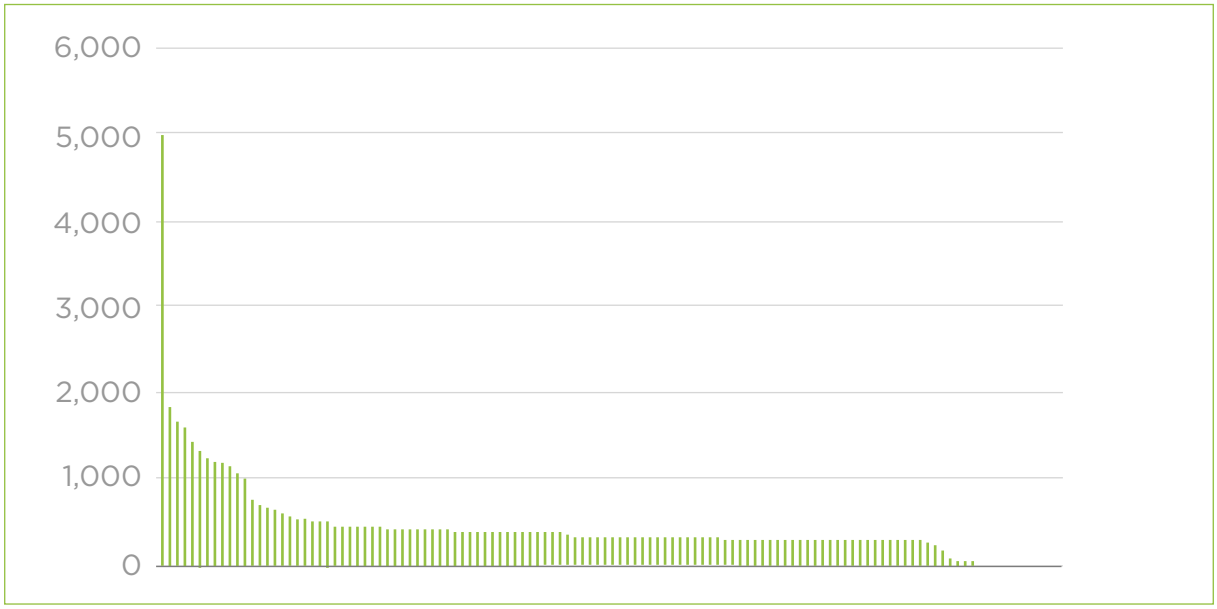


Source: RCN Survey 2017

The variation in costs ranged from £3,582 to £130 per tonne.

Infectious waste – orange

Figure 9: Infectious (orange) waste, range of costs reported by trusts per tonne per type



Source: RCN Survey 2017

The variation in costs ranged from £5,000 to under £100 per tonne.

Infectious waste – yellow

Figure 10: Infectious (yellow) waste, range of costs reported by trusts per tonne per type

Source: RCN Survey 2017

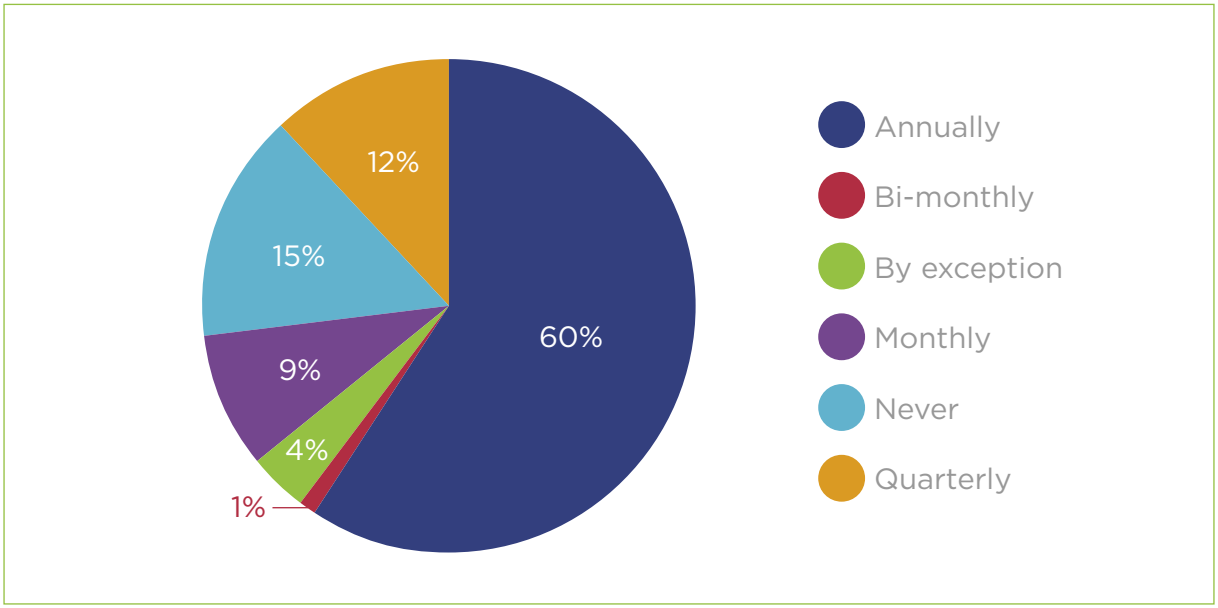
The variation in costs ranged from £22,000 to under £100 per tonne.

Reporting on waste

The purpose of NHS boards is to govern effectively and efficiently in a transparent accountable environment. Waste management performance metrics are the basic components of adherence to legislative requirements and offer financial intelligence for potential cost savings for individual NHS organisations.

Our FOI requests (2017) asked respondents to declare how regularly they report on waste management at board level. Response options were monthly, quarterly, annually, never or other. The results showed over half of the organisations (60%) report on waste on an annual basis however the level of detail is unknown. There has been a drop between 2010 and 2017 from 18% to 12% on reporting quarterly, monthly is similar at 9%.

Figure 11: Reporting frequency on waste 2017



Source: RCN Survey 2017

Table 6: breakdown of the responses on reporting to trust boards received in 2010 and 2017

	England		England	
	2009/10		2015/16	
Monthly	24	9%	16	9%
Quarterly	47	18%	21	12%
Annually	113	44%	106	60%
Other	36	14%	9	5%
Never	36	14%	26	15%
Total responses	256	100%	177	100%

Source: RCN Survey (2011, 2017)

Discussion and recommendations

Current guidance on the management of health care related waste is provided in HTM 07-01: *Safe management of health care waste* (DH, 2013). This UK-wide document represents best practice. Whilst not mandatory, compliance with this document enables health care organisations to be compliant with their statutory obligations for managing health care waste, while permitting any derivations necessary to ensure they are in line with requirements of their relevant jurisdiction i.e. England, Scotland, Northern Ireland, or Wales.

Response rate

A response rate of 69% was achieved to the FOI request for information from NHS trusts in England. Of the 31% of trusts that did not respond, reasons included duplication of data submitted to the Estates Return Information Collection (ERIC) and commercial sensitivity. Since the first RCN FOI report published in 2011, the NHS in England has undergone significant re-organisation and the total number of trusts eligible to respond reduced from 415 in 2011 to 227 in 2017.

Data submitted by respondents provides an indication of the proportion of waste produced for bagged municipal, infectious and offensive waste categories and, where comparison with the RCN 2011 report is possible, the trends within this. The report covers only England as there has been a sustained focus on productivity across the NHS in England, and with that comes a greater opportunity to highlight where changes can be made to current systems and processes that offer both the environment benefits and financial savings from the better management of waste.

Total amount of waste produced

The Department of Health (England) system for recording waste produced by health care organisations is the Estates Return Information Collection (ERIC). This data system was recently revised on the advice of the National Advisory Performance Group (NPAG), however this system still does not differentiate clearly between different categories of waste. This means that an understanding of the amounts of bagged waste generated by trusts, as the largest proportion of waste, is not possible. ERIC categorises waste by treatment/disposal route i.e. high temperature disposal of waste, non-burn treatment (alternative treatments), landfill and waste recovery. Therefore, as in 2011, a like-for like comparison for either tonnage or processing cost arising from this survey with the ERIC data is not possible.

In practice this means that NHS trusts will find it difficult to compare themselves to similar organisations in a meaningful way, reducing opportunities to drive improvements and generate financial and environmental benefits. Whilst we have identified potentially significant variations in practice and costs of managing waste, we believe that the lack of available comparable data is a major obstacle to realising the substantial benefits that would be possible if the data were available.

Respondents have indicated that municipal (residual and recycling) and infectious wastes (orange and yellow bagged waste) remain the two largest types of bagged waste produced.

Direct comparison with 2009/10 data is not possible due to the changes in NHS trusts since 2011. However, in terms of percentages of waste generated, the data suggests offensive waste has increased only slightly with a small reduction in clinical waste. Caution should be applied as accurate data is not available currently and therefore the true picture of changes over time is unknown.

Recommendation

The criteria for data collected through ERIC should be reviewed and amended to allow for better comparable meaningful data, including the amount of weight produced per waste category, as opposed to disposal route, to be collected and analysed over time.

Data published should permit evaluation of waste improvement programmes and trends in waste management amounts and cost over time.

Costs of waste collection and disposal

Data from respondents indicates the average total spend per trust for the three categories of bagged waste continues to increase year-on-year (Figure 7). When considering the average cost per tonne of bagged waste, municipal and infectious wastes have increased, with only a slight decrease in offensive waste.

Bed capacity in the NHS has decreased since our 2011 report and the total amount of waste generated appears to have decreased by approximately 16% however overall costs are rising. Caution should be applied regarding interpretation of this data however as NHS activity has increased overall (Kings Fund, *The NHS in a nutshell*), and real time trends in waste data are not available.

Data from respondents identified significant variations in costs associated with disposal of waste per tonne. Table 5 illustrates this succinctly, as do the accompanying figures showing the range of costs paid by trusts. Further information on how such apparent differences in costs are incurred would help the NHS to understand the range of variation, and anticipate future needs to enable actions to be taken to reduce costs, and consider any emerging alternative treatment or care options (e.g. how costs are broken down including collection/ transport and disposal/treatment costs). For trusts that produce small amounts of waste, or who have multiple sites requiring collection for example, higher costs may be incurred due to transport or collection requirements rather than the disposal cost (per tonne per bagged waste type) produced.

Acknowledging the various ways waste management is procured may go some way to help a broader understanding of the impact on costs to the NHS. Waste contracts vary considerably and a variety of waste management companies are used, each of which may use different final disposal processes, or provide data in variable formats and frequencies. Given the move towards integrated care systems and more care provided outside of hospitals, an opportunity exists to consider future waste contracts on a potential locality or STP footprint. The variation in volumes produced and difficulty of managing multiple small contracts should be considered a lever for greater co-operation and alignment of waste management processes and systems in the future.

It is not possible to identify how many NHS trusts employ a dedicated waste manager (with relevant experience and knowledge of the waste sector) to manage waste contracts, or the proportion that utilise companies that manage waste on their behalf. However, it is worth acknowledging the advancements in on-site waste processing sites, such as that in place at Whipps Cross Hospital, part of Barts and the London NHS Trust, which offer a vision of what opportunities lie in the future for carbon reductions and financial savings.

Recommendation

The potential opportunity to manage waste on a locality or STP footprint should be investigated to identify potential service, resource and financial savings.

Risk assessment of infectious waste

In practice much of the waste produced by health care organisations is unlikely to be infectious as defined in HTM 07-01. The recent point prevalence survey of health care associated infections in England identified approximately 6.6% as having a health care associated infection at any one time (PHE, 2017). Acknowledging that in hospital settings a proportion of patients will be undergoing investigations or receiving treated for possible infection, we suggest the total percentage of patients receiving care that meet the definition for categorisation of infectious waste as per HTM 07-01 may be approximately 20%. This estimate is not based on the number of patients receiving antibiotics, as many patients receive antibiotics as a precautionary measure.

Likewise, the total waste generated from a patient with an infection does not normally require classification as infectious, only those wastes in contact with the infection site (for example a wound dressing if a wound infection is present). If this estimate is reasonable, then the potential opportunity to reduce infectious waste and reclassify as municipal or offensive is significant especially if the trusts implement the guidance offered in the RCN's guidance on waste management (RCN, 2018 in press)

Risk assessment of waste by NHS Staff

As mentioned, HTM 07-01 provides the definitive guidance for decision making with respect to waste classification and segregation. Any health care worker that generates waste is responsible for assessing what type of waste it is and for placing it in the appropriate container, (for example waste for recycling, household, offensive or infectious wastes).

Any definition of infectious waste is based on the premise that the waste concerned poses a known or potential risk of infection. Within health care, an underlying principle of practice called 'standard infection control precautions' is used. This principle, developed as a result of concern over AIDS in the early 1980s, aims to protect patients and staff from infection due to blood borne viruses (e.g. HIV/ Hepatitis B and C) that may be present in blood or body fluids.

As it is not always possible to tell who may be carrying a blood borne infection, blood and body fluids from patients are usually treated as potentially infected and therefore managed via the infectious waste stream unless the person has been screened and found not to be carrying a blood borne infection (as in for example maternity settings). Over recent years the principle of standard precautions has been extended in practice to embrace a broad assumption, based on caution, that it is not possible to tell which patients may be colonised or carrying micro-organisms capable of causing infection on their skin.

Such a principle is frequently associated with antibiotic resistant bacteria such as MRSA or other multi-resistant organisms such as Carbapenemase-Producing Enterobacteriaceae (CPE). In practice this means many more patients are treated as 'infectious', with waste generated as a result of care assessed as having infectious properties, driving how waste is managed in both hospital and non-hospital settings.

The updated HTM 07-01 (DH, 2013) provides clarity to support staff to assess if waste is deemed to meet the definition of infectious. The RCN acknowledges that caution should be applied to the accuracy of the data reported by respondents in this report; however, the low reported use of the offensive waste stream appears to reflect current practice as reported by its members and implies waste is sometimes not correctly classified or segregated with over segregation of infectious waste.

Any misclassification of offensive waste can result in an unnecessary dependence upon high temperature incineration or alternative treatments resulting in additional costs associated with the relatively high charges for treating hazardous wastes. The reasons for low use of the offensive waste stream in practice remains unclear, however, given that in reality the amount of genuine infectious waste is most likely lower than reported, opportunities exist for improvements.

Recommendation

Building on the work of Lord Carter's report *Operational productivity and performance in English NHS acute hospitals: Unwarranted variation* (HMSO, 2016), NHS Improvement (NHSi) should investigate apparent variations in waste types generated by all NHS trusts and support improvements to reduce variations in assessment of waste and associated costs.

Disposal of waste

Developments in adoption of energy from waste technologies are increasing, and although questions on disposal were not included in 2017, the expectations of trusts to report on and increase use of sustainability technologies has increased.

The Sustainability Development Unit's (SDU) Sustainable Development Assessment Tool (SDAT) supports NHS trusts to meet their reductions in carbon dioxide equivalent emissions as part of a national ambition of reductions by 34% by 2020 through implementation of a Sustainable Development Management Plan (SDMP).

It is unclear currently how many NHS trusts have a SDMP in place and how this impacts on decisions regarding disposal of waste and use of carbon reduction technologies or processes. Without accurate data on the amounts of different wastes produced and the disposal methods used, it is not possible to monitor trends or learn from those who have successfully achieved financial and environmental reductions.

Compaction of waste

This question was repeated in the 2017 FOI questionnaire and remains at low levels with 6% of responding trusts using this process. The 2011 RCN FOI report highlighted that landfill at that time was the primary method of disposal for offensive waste (25%) with energy from

waste methods at 7%. It is unclear currently if compaction of waste remains a sustainable option for the future.

Reporting on waste to trust boards

The frequency of board reporting varied between respondents, with most organisations undertaking annual reporting (60%). The number of trusts than never report on waste was 14%. This data however does not identify the level of reporting that trusts receive so it is unknown at this stage whether information provided is sufficient to provide trust assurance or challenge regarding waste contracting arrangements. Although HTM 07-01 requires 'ownership of the policy at the senior managerial level' interpretation in practice may vary, with ownership sometimes delegated to operational personnel e.g. estates staff, as opposed to the board. The Sustainable Development Unit offers key actions to support low carbon systems which are:

1. Management of domestic, clinical and hazardous waste should be reported at board level as a key part of sustainability reporting.
2. Boards should undertake a balanced risk assessment of all waste, and its associated costs and carbon including those related to single issue, use and disposal policies in contrast to sterilisation and re-use policies.
3. Organisations should ensure they have the necessary skills to manage waste legally, efficiently and cost effectively.
4. Organisations should monitor the quantity and cost of all waste streams and set trajectories to monitor, manage and reduce them over time.

As stated previously it is unknown how many trusts have a strategy or assessment tool in place supporting waste management. Increased board awareness of waste, associated cost savings and barriers to implementation to support compliance could be a lever for improvements in practice at organisational level.

Recommendations

NHSi should compare data on trusts' waste management systems and costs against SDMPs to identify where further improvements may be made.

NHS England, through commissioning processes, should ensure all trusts utilise the expertise of a suitable qualified and experienced waste manager to support nursing teams and departments to create to create and manage various quality assured sustainable waste systems.

Impact of procurement on waste generation and management

The procurement of equipment, consumables and supplies is inextricably linked to the generation of waste. Packaging is a major issue for nursing staff. Where and how instructions and symbols are written, how items can be opened, packaging disposal, and the storage of items all impact on the generation of waste when providing care.

The NHS Clinical Evaluation Team in its series of clinical evaluations, has identified packaging as one of the central elements to clinical evaluation. Moving forward with the implementation of the Future Operating Model (FOM) in England, an increased focus on the impact and potential of procurement processes to support waste reductions must be strengthened. Additionally, a review of single use items and their constituent parts, for example plastics, should be undertaken to support a reduction in waste going to landfill and recycling of items where possible.

Recommendation

Building on the work the NHS Clinical Evaluation Team, focus the importance of procurement criteria for the selection of consumables equally on quality and safety as the ability to dispose of packaging or used items. All Medical Category Tower Providers (organisations providing procurement services to the NHS in England) should publish an annual report on the impact of procurement decisions to waste and carbon equivalent reductions.

A review of the use of single use items constituent parts, particularly plastics should be undertaken to identify actions needed to promote recycling of plastics.

Implications for nursing

The International Council of Nurses' position statement (ICN, 2010) clearly outlines the role the natural environment plays in global health and the associated risk of health care waste. As such, nurses have a responsibility to not only reduce the impact of waste but also to influence clinical and policy decisions on health care waste through their respective professional representative bodies. Awareness of the impact of waste from an environmental and financial perspective is the first step in engaging nurses and nursing on this issue.

Whilst nurses have been highlighted as the largest producers of waste, they are not the only producers, and any efforts to manage health care waste effectively must be approached and managed from an organisational perspective. This is required in order to capture and manage all relevant issues impacting on waste management (including treatment and disposal) such as the built (clinical) environment, placement of waste bins, collection times, audit, purchasing of consumables and specialist knowledge of waste processes and statutory requirements.

The financial benefits of employing a dedicated specialist waste manager has been clearly highlighted previously, with savings generated through effective waste management paying for the position, and contributing to additional financial savings. Nursing teams, as the largest producers of waste, and NHS trusts alike, would undoubtedly benefit from the expertise and support of dedicated waste managers in the workplace.

References

Department of Health (2016) *Operational productivity and performance in English NHS acute hospitals: Unwarranted variation, a report by Lord Carter of Coles*, London: HMSO, www.gov.uk/government/publications/productivity-in-nhs-hospitals (accessed 3 December 2017)

Department of Health (2013) *Health Technical Memorandum 07-01: Safe management of healthcare waste*, London: Crown Copyright, www.gov.uk/government/publications/guidance-on-the-safe-management-of-healthcare-waste (accessed 3 December 2017)

Kings Fund (web) the NHS in a nutshell, www.kingsfund.org.uk/projects/nhs-in-a-nutshell (accessed 3 December 2017)

Public Health England (2017) *English surveillance programme for antimicrobial utilisation and resistance* (ESPAUR), London: Crown Copyright, www.gov.uk/government/publications/english-surveillance-programme-antimicrobial-utilisation-and-resistance-espaur-report (accessed 3 December 2017)

Royal College of Nursing (2011) *Freedom of Information report on waste management*, London: RCN, www.rcn.org.uk/professional-development/publications/pub-004108 (accessed 3 December 2017)

Further sources of information

Estates Return Information Collection (ERIC), http://hefs.hscic.gov.uk/ERIC.asp

Green Nurse Network, https://networks.sustainablehealthcare.org.uk/network/green-nurse-network

NHS Business Services Authority (2017) *The Future Operating Model for NHS procurement*, www.nhsbsa.nhs.uk/sites/default/files/2017-06/FOM_general_guide_0.pdf (accessed 13 December 2017)

NHS Clinical Evaluation Team, www.nhsbsa.nhs.uk/nhs-procurement-stakeholder-boards/nhs-customer-board-procurement-and-supply/nhs-clinical

Sustainability Development Unit, www.sduhealth.org.uk/policy-strategy/what-is-sustainable-health.aspx#

Chartered Institute of Waste Management (CIWM), www.ciwm.co.uk

CIWM (2016) *An Introductory Guide to Healthcare Waste Management in England & Wales*, www.ciwm-journal.co.uk/downloads/Healthcare-Waste-WEB.pdf (accessed 13 December 2017)

Appendix – FOI letter

Dear FOI Officer,

FOI Request from the Royal College of Nursing

This is a request under the Freedom of Information Act 2000 to ascertain information regarding financial efficiencies relating to healthcare waste management and procurement.

Please could you provide the following information relating to the amount, cost, methods and reporting of the disposal and treatment of municipal, healthcare and clinical waste.

The questions below relate to bagged waste only, including the following:

- Municipal waste, residual (not segregated for recycling);
- Municipal waste, recyclable (segregated by single type or as a comingled recyclable stream);
- Offensive waste;
- Infectious waste streams, orange and yellow categories (not sharps).

Please indicate the total amount of waste (in weight) produced by your organisation:

	Tonnes 2014/15	Tonnes 2015/16
Municipal, residual (black bags)		
Municipal, recycling		
Offensive (tiger stripes)		
Infectious (orange), suitable for alternative treatment		
Infectious (yellow), requiring incineration		

The associated costs for collection and treatment/disposal of these wastes:

	£ 2014/15	£ 2015/16
Municipal, residual (black bags)		
Municipal, recycling		
Offensive (tiger stripes)		
Infectious (orange), suitable for alternative treatment		
Infectious (yellow), requiring incineration		

Do you currently compact offensive waste? Yes/No

If No – do you have plans to implement compaction in the next financial year?

How often does your organisation report on the management of waste (including cost) at Board level?

Annually/quarterly/monthly/never.

Do you currently employ any nurses specifically to support the procurement of consumables/supplies/equipment in your organisation (for example a specialist procurement nurse)? Yes/No
(if yes, how many full time equivalents do you employ?)

I would like the above information to be provided to me as electronic copies emailed to foi@rcn.org.uk

I understand that you are required to respond to my request within the 20 working days after you receive this letter.

If you have any questions regarding this request please contact my colleague Rose Gallagher on 020 7647 3766 or rose.gallagher@rcn.org.uk

I look forward to hearing from you.

Yours faithfully

Janet Davies
Chief Executive & General Secretary

The RCN represents nurses and nursing, promotes excellence in practice and shapes health policies

RCN Online
www.rcn.org.uk

RCN Direct
www.rcn.org.uk/direct
0345 772 6100

Published by the Royal College of Nursing
20 Cavendish Square
London
W1G 0RN

020 7409 3333

Date: February 2018
Publication code: 006 683

Royal College of Nursing