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Produced by the Knowledge Management team Evidence Briefs offer an overview of the published reports, research, and evidence on a workforce-related topic.

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There may have been an update to this Evidence Brief - to check you are reading the most current version please see the links below:

- Complete Evidence Brief list link for Workforce, Training and Education staff
- Complete Evidence Brief list link for External staff

Key publications – the big picture

NHS Long Term Workforce Plan

NHS England, 2023 updated January 2024

Expanding apprenticeship routes can help address key workforce shortages and particularly benefit those professions that historically lack a consistent route for training and career development, such as non-clinical professionals in corporate services, estates and facilities and general management.

[...]

As well as expanding educator capacity, we need to address the challenge of expanding the physical estates capacity for supervision to take place in parallel. This is particularly critical in primary care where insufficient physical space across an ageing estate limits GPs' ability to increase training placements. Various initiatives are planned or underway to explore models of supervision and estates that increase access and capacity, but as this is a broader challenge than training and equipping the workforce to deliver for patients, it is outside the scope of this Plan and will require continued, sustained investment in the primary care estate.

NHS estates sustainability career pathways

NHS England, 2023

The career pathways presented in this report are not intended to prescribe a rigid approach towards successfully developing a sustainability career in NHS estates and facilities. Instead, they demonstrate the variety and types of roles available, experience required, and competencies needed for professional development, plus the resources available to support these careers.

Estates net zero and sustainability recruitment guidance NHS England, 2023

This document provides guidance and recommendations to NHS recruiters intended to improve attraction and retention of candidates in NHS estates sustainability roles, recognising that to meet its ambitions for net zero by 2040, the NHS must maximise the pace and effectiveness of its recruitment and ensure the retention of a skilled, fit for purpose sustainability workforce. Recommendations are supported by the findings of a benchmarking exercise intended to evaluate the NHS's position within the wider UK estates and facilities sustainability and net zero jobs market.

The NHS Premises Assurance Model (NHS PAM)

NHS England, 2023

The NHS operates over 1,200 directly managed hospitals as well as nearly 3,000 other treatment facilities, many of which operate 24/7, every day of the year. The occupied floor area of the NHS is 24.3 million m2, which is the equivalent of 3,400 football pitches.

NHS estates and facilities workforce action plan

NHS England, 2022

This action plan sets out how we will fulfil the ambitions of the NHS people plan and NHS people promise for our estates and facilities workforce across England over the next ten years, with a focus on the immediate priorities outlined in the 2022/23 operational planning guidance. It highlights four key areas of work: developing our people; building the next generation of estates and facilities management people; embedding equality, diversity and inclusion; and improving the health and wellbeing of our people.

Brick by brick: The case for urgent investment in safe, modern, and sustainable healthcare estates

British Medical Association, 2022

This report examines the alarming condition of the UK's healthcare estate, shining a new light on its impact on doctors and the patients they care for, and making a powerful argument for urgent investment in the bricks and mortar of our health systems.

Delivering a 'Net Zero' National Health Service

NHS England, 2022

This report provides a detailed account of the NHS' modelling and analytics underpinning the latest NHS carbon footprint, trajectories to net zero and the interventions required to achieve that ambition. It lays out the direction, scale and pace of change. It describes an iterative and adaptive approach, which will periodically review progress and aims to increase the level of ambition over time.

Complete list of NHS estates related guidance

NHS England, 2021

Updated 2023

This list identifies the current status of each document, including whether it has been superseded and whether it is available for download.

The types of documents currently available include:

- health building notes
- · health technical memorandums
- Other miscellaneous NHS estates related standards or guidance

Corporate Social Responsibility Our progress 2018-2020

NHS Property Services, 2021

During the COVID-19 pandemic, supporting the mental health and wellbeing of our teams became more important than ever before. We provided a three-month programme of wellbeing webinars, online materials and booklets to help colleagues adjust to remote working, build resilience and create healthy habits. As a signatory to the Mental Health at Work Commitment, we will continue to promote a more open culture around mental health and develop tools and support aligned with the Thriving at Work standards.

How to produce a Green Plan: A three-year strategy towards net zero

NHS England, 2021

The report set out trajectories and actions for the entire NHS to reach net zero carbon emissions by 2040 for the emissions it controls directly, and 2045 for those it can influence (such as those embedded within the supply chain).

Creating sustainability for the NHS estate

NHS Confederation, 2020

In the latest report by our Associate of the Month, DAC Beachcroft, partner Anne Crofts is joined by a number of experts in real estate to discuss the challenges that the health sector faces when it comes to creating a truly sustainable healthcare estate. Here, Anne presents some of the ideas that were shared by these experts to raise capital and generate locally effective and accountable ways of using it.

Health infrastructure plan

UK Government, 2019

The health infrastructure plan (HIP) will deliver a long-term, rolling 5-year programme of investment in health infrastructure, including capital to:

- build new hospitals
- · modernise the primary care estate
- · improve mental health facilities
- · invest in new diagnostics and technology
- help eradicate critical safety issues in the NHS estate

Building healthier communities: the role of the NHS as an anchor institution

The Health Foundation, 2019

Converting NHS land and facilities for community use can also require significant upfront investment that many NHS organisations cannot afford in the current financial climate. Stakeholders emphasised the overriding pressures in the NHS from system leaders and trust boards to sell any surplus land on the open market to the highest bidder, even if gains are short-term:

'We've engaged with housing associations, we've engaged with primary care associations, all are very keen for us to promote and take forward plans to develop affordable housing. We find ourselves slightly thwarted by the centre... They are completely focused on today's agenda as opposed to a more broad, long-term view.'

NHS Property and Estates: Why the estate matters for patients An independent report by Sir Robert Naylor for the Secretary of State for Health, 2017

This report therefore calls for the NHS, through the STP process to rapidly develop robust capital plans which are aligned with clinical strategies, maximise value for money (including land sales) and address backlog maintenance. Government should support these plans by providing capital, but only where a strong case has been made. The review recognises that STPs are at different points in their development so we do not expect all areas to progress and require funding on the same scale or at the same time. The allocation of additional public funds should be proportional to the amount received from property disposals.

A toolkit to support the development of a hospital food and drink strategy

Department of Health, 2016

The Department of Health has created this toolkit, in conjunction with the Hospital Food Standards Panel, to support NHS hospitals in the development of a food and drink strategy, one of the requirements identified in the NHS Standard Contract.

<u>The Hospital Food Standards Panel's report on standards for food and drink in NHS hospitals</u>

Department of Health, 2014

The Panel recommends that all NHS hospitals should develop and maintain a food and drink strategy. This should include:

- the nutrition and hydration needs of patients
- healthier eating for the whole hospital community, especially staff
- sustainable procurement of food and catering services

Estate strategy and optimisation

NHS Property Services, no date

Offices make up a significant proportion of the NHS estate, and NHSPS has a dedicated team responsible for reviewing opportunities relating to offices, helping the NHS get the most from its office estate.

Case Studies

Partnering with an Integrated Care System to develop an enabling estate for healthcare transformation

NHS Property Services, 2020

We have built a close and productive relationship as part of the ICS team, which includes:

- Supporting business case development, working up projects to deliver new and/or improved facilities.
- Upon securing funding, supporting the design and delivery of construction projects ranging from small scale refurbishments to large new builds. Including leveraging

- our town planning expertise to secure planning permission.
- Developing and analysing options for relocations, running feasibility studies and assessing our own portfolio and beyond to identify the most suitable sites.
- Acting as landlord, in some cases taking on head leases to ensure continuity of service.
- Supporting social prescribing networks by introducing suitable and affordable spaces for charities and community services to operate.
- Providing additional bed capacity for Covid-19 treatment, recommissioning and reconfiguring space in our buildings.

Inter-Hospital Knowledge Sharing: Insights From Case Studies on Infrastructure Issues During COVID-19

Proceedings of the 24th European Conference on Knowledge Management, ECKM 2023

The study concludes that a centralised coordination function is necessary to facilitate effective KS, with a focus on the organisation of peer collaboration, enhancing the centralised online repository for best practice and academic research, and the use of a national skills register. The study extends the current literature by identifying variations in KS behaviour among managerial levels and providing insights into the barriers to KS in the NHS EFM workforce. The findings have implications for NHS managers and policymakers seeking to improve KS in the EFM workforce, particularly in addressing the barriers faced by operational-level managers and the need for a centralised coordination to facilitate effective KS.

Collaborative working in hospice estates and facilities teams and the creation of innovation

BMJ Supportive & Palliative Care, 2017

Sharing knowledge and experience of estates and facilities teams at both hospices led to tangible, measurable benefits. The

experience required both hospices to have a positive attitude towards change and be open to new ways of doing things. Both hospices have agreed to continue to work collaboratively and on current and future estates and facilities projects.

Assessment of facilities management process capability: a NHS facilities case study

International journal of health care quality assurance incorporating Leadership in health services, 2002 Describes a process to assess facilities management (FM) process capabilities: the structured process improvement for construction environments--facilities management (SPICE FM) approach. The SPICE FM framework is a method that FM organizations can use to monitor continuously and subsequently improve their performance. The SPICE FM framework is being tested in a series of case studies to ensure that its outputs are appropriate to the FM sector and of value in the real world. Documents the outcomes of a study undertaken at a facilities directorate of a healthcare NHS trust, in searching its applicability within the NHS. Further describes the study methodology and the key activities undertaken and reviews the key communication and management processes that are in place to support the implementation of the strategic FM objectives within the specific NHS facilities directorate.

Estates and Technology Transformation Fund Case Studies NHS England, no date

The following are examples of how the Estates and Technology Transformation Fund (ETTF) is benefitting local GP services and their patients.

Building for health case studies NHS England, no date

We have summarised the key ways estates and facilities can play their role in reducing health inequalities in our 10 building blocks for building for health.

The building blocks can be applied to all aspects of estates management including in the:

- delivery of new healthcare buildings, for example through the New Hospital Programme or the development of community diagnostic centres
- modernisation of NHS facilities
- prioritisation of investment
- management of the use of NHS buildings and spaces
- 'disposal' or repurposing of facilities the NHS no longer needs – the NHS Estates and facilities workforce action plan (2022) sets out ways to address estates workforce needs.

The building blocks can be applied to the concept, detailed design and construction and operation stages.

The Star for workforce redesign

More resources and tools are available in the Star.

Statistics and data

Estates and facilities data hub

NHS England, formerly NHS Digital

NHS Digital collects a large variety of data on the NHS estate including costs, incidents, land surplus to requirements, and the quality of the healthcare environment from the patient perspective.

Estates and Facilities Management Information System NHS England, formerly NHS Digital

Data are collected and stored using the Estates and Facilities Management (EFM) System. This is a secure data warehouse that enables efficient data collection and analysis and produces benchmarking results in real time.

National Data Programme

Workforce, Training and Education staff can look at the <u>National</u> <u>Data Warehouse (NDL)</u> SharePoint site to find out more about datasets and Tableau products.

Policy Examples and Published Peer Reviewed Research

Policy and strategy examples

Estates and Facilities Operational Management Policy [Download PDF link]

Doncaster and Bassetlaw Teaching Hospitals, 2022 This policy provides guidelines to cover:

- A clearly defined Estates and Facilities Operational Management Policy (this Policy)
- Qualitative statements about the services to be provided.
- Programmes for continuing improvement in delivering those services.
- The framework, constraints and boundaries within which those services are delivered.
- The organisation, roles and responsibilities of Estates and Facilities directorate staff and resources to provide those services.
- The means of measuring and monitoring the efficacy and efficiency of the Estates and Facilities Department; and to assure

value for money, to regularly review the scope and definition of provided Estates and Facilities Directorate services within a healthcare environment.

Estate and Facilities Strategy

Manchester University NHS Foundation Trust, 2023
The aim of the strategy is to set the forward view for not only the MFT estate but for the digitisation of the estate and estates functions and future proofing our E&F activity via our Workforce Strategy. The MFT Green Plan is also woven into the E&F strategy to ensure that sustainability is a key priority of estates delivery. The Strategy has been developed to ensure we have an estate that is fit-for-purpose, digitally advanced, futureproofed, cost efficient and sustainable.

Estate and Facilities Management Strategy

Royal Devon University Healthcare NHS Foundation Trust, 2023 Our aim is to support delivery of the Better Together objectives by developing, delivering and operating estate that is fit for purpose - now and in the future - utilising our resources to deliver best value and maximum benefit for our patients and staff.

Peer-reviewed research

Estates and Facilities

Trust and knowledge sharing among hospitals during COVID-19: the compound effect of four barriers to organisational trust for knowledge sharing

VINE Journal of Information and Knowledge Management Systems, 2023

COVID-19 highlighted the potential value of improving knowledge sharing (KS) processes among hospital estates and facilities management (HEFM) departments.

[...]

This study identifies four organisational features with a compound barrier-effect on impersonal-based OT, interpersonal-based OT and personal trust for KS interactions: lack of professional development, inappropriate reward and incentive systems, reorganisations/organisational change and benchmarking.

<u>Digital technologies and healthcare architects' wellbeing in the National Health Service Estate of England during the pandemic Frontiers in medical technology, 2023</u>

In the niche area of healthcare architecture, architects were in their busiest year. Yet, the DTs available to them then could only support limited tasks and did not link well to operational data.

Mapping Knowledge Needs of Hospital Estates and Facilities Management Teams: Insights from a Delphi Study

[Conference abstract]

Proceedings of the 19th European Conference on Management Leadership and Governance, 2023

We identify four key categories of knowledge areas, illustrating evolving needs as professionals progress in their careers. Within these areas, four trends emerged across various hierarchical levels. Firstly, a reliance on external Authorising Engineers (AEs) for Technical Expertise & Experience, Benchmarking & New Technologies, and Professional Development was evident, raising concerns about aligning organisational expectations with top management expertise. Secondly, the skills required for the sustainability and digitalisation agenda lack emphasis, highlighting a crucial gap between organisational strategy and practical focus. Collaborative Proficiency surfaced as important for Managers and Heads of EFM, underscoring the importance of interdisciplinary collaboration. However, at the Director of EFM level, there is a lower emphasis on networking and collaboration, which is in contrast to the current restructuring of the NHS towards Integrated Care Systems. Furthermore, the Directors of

EFM have a strong focus on Financial Management skills, possibly influenced by the prevalent Board reporting structures. This focus, paired with the lack of focus on Technical Expertise & Experience and Benchmarking & New Technologies could influence the ability to secure funding for cutting-edge technologies while posing a large financial risk of relying on legacy systems. These findings underscore the need for targeted training programmes addressing these disparities and emphasise the importance of aligning organisational structures with evolving knowledge needs for effective healthcare EFM management.

Towards sustainable and resilient healthcare: Exploring knowledge sharing barriers and channels among NHS hospital estates and facilities departments

[Conference abstract]

Apollo - University of Cambridge Repository, 2021
The findings uncover a multitude of barriers throughout the KS process. Continuous structural reorganisations of the NHS, silothinking, inter-hospital competition, a lack of investment in professional development and additional complexities due to different ownership and service outsourcing models create a challenging environment for effective inter-organisational KS. Regarding KS channels, the NHS is still lacking a holistic strategy through which different types of documented and undocumented knowledge can be shared.

The case for more modular facilities in the NHS

British Journal of Healthcare Management, 2021

The first of three instalments, this paper will outline the problems facing the NHS estate, many of which have been exacerbated to critical levels by the COVID-19 pandemic, and what this means for service delivery. It will then make the case for modular infrastructure, outlining the potential benefits for healthcare services, staff and patients alike.

<u>Practical considerations for the commissioning and delivery of modular facilities</u>

British Journal of Healthcare Management, 2021
This article, the second in a series of three, will discuss the process of commissioning a modular facility, drawing on two indepth case studies to provide insight from healthcare managers who have successfully completed such a project. This includes exploration of the circumstances that led the trusts to consider a modular solution, the challenges they faced, how they overcame those challenges and the benefits they have observed in their services so far.

Placing modular facilities in a resource-limited healthcare system

British Journal of Healthcare Management, 2021
The previous two articles in this series have focused on the potential benefits of modular facilities to healthcare staff, services and patients, drawing on case studies of NHS trusts that have implemented modular facilities on their sites. This article, the third and final instalment of this series, discusses the health economic impact of current NHS infrastructure, and explores the ways in which modular facilities could provide a flexible and cost-effective means of expanding capacity and improving services in a resource-limited environment.

The mediating effects of finance on the performance of hospital facilities management services

Journal of Building Engineering, 2021

The study should motivate hospital management to prioritize FM in hospitals as part of sustainable resource management to improve healthcare outcomes. This, however, requires healthcare managers to acknowledge the role of FM in healthcare delivery rather than seeing FM as cost centres. It is thus recommended that performance-based financing should be encouraged.

<u>Developing key performance indicators for hospital facilities</u> management services: a developing country perspective

Engineering, Construction and Architectural Management, 2020 Adapting an expanded balanced scorecard typology, the paper identifies 17 KPIs, which are useful for performance improvement of FM. The study also introduces new financial dimensions beyond the traditional cost and profit-centered metrics.

Facilities management in the NHS: overlapping authority and demarcation disputes

Facilities, 2019

This research aims to investigate the implementation of the new ward housekeeper role in a hospital setting. The purpose is to propose a model to demonstrate how facilities management (FM) departments and clinical ward teams work together effectively to deliver catering and cleaning services.

<u>Performance measurement for the strategic management of health-care estates</u>

Journal of Facilities Management, 2018

Responding to a gap in understanding of the application of performance measurement in the context of health-care estates, this research provides three recommendations to promote a more effective and relevant performance measurement system. These actively recognise the importance of the estate within strategic decision-making as helping to inform the long-term planning and management of the estate within the individual NHS boards.

The history of healthcare facilities management services: a UK perspective on infection control

Facilities, 2018

Among many other things, this research raises the profile of HFM staff in relation to the issue of IC in hospitals. It presents convincing evidence to show that the relationship between the clinical and non-clinical domains in controlling infections in hospitals has a long history. The findings of this research give HFM staff invaluable information about the significant role of their profession in the control of infections in hospitals.

A critical analysis of strategic performance measurement in supporting estate decisions in NHS Scotland

[Conference abstract]

33rd Annual ARCOM Conference, 2017

National Strategic Performance Measurement Systems (SPMSs) for Estates Management (EM) are becoming a more common tool among governmental agencies and the enforcement of their adoption to the different operational (regional or municipal) units. In theory, governments assume that Senior Estate Managers will use the information provided by the performance measures for strategic decision-making over the life cycle of the facilities; however, there is little evidence that in practice this is happening. To address a gap in the literature this study seeks to understand current practice in the use of strategic performance measures set nationally for Estate Management strategic decision-making at Senior Estate Managerial level. The research looks at the healthcare sector, taking the case study of NHS Scotland. Based on sixteen semi-structured interviews with Senior Estate Managers across different Scottish NHS Boards, the study found that the implementation of SPMSs has a symbolic power rather than instrumental. The lack of integration between Clinical Services and Estate Management and issues related to the design reduces the potential of SPMSs to be an effective instrumental tool.

Exploring BIM Preparedness Among National Health Service Facilities Management

International Journal of 3D Modelling, 2017

The aim of this article is to explore how prepared NHS facilities managers (FM) are for the introduction of the BIM 2016 mandate. To do this an online questionnaire survey and face to face interviews were conducted to identify NHS FM professionals' awareness, understanding, experience, and opinions of BIM and organisational readiness. Analysis of the primary data shows that NHS FM professionals are underprepared to engage fully with BIM in a competent manner with many failing to demonstrate knowledge of the fundamental principles of BIM. By developing an understanding of NHS FM professionals current skills, knowledge, experience and opinions with regards to BIM this article aims to help future studies understand what key elements should be considered by public sector organisations when establishing a BIM for FM implementation framework.

Exploring the attributes and KPI's adopted by international healthcare providers to measure the performance of their estates at the strategic level

[Conference abstract]

Proceedings of the 32nd Annual ARCOM Conference, 2016
The requirements to improve the healthcare estate driven by changes in government priorities, the evolving healthcare agenda, and ever tightening budgets are asking estate managers to question what a good health estate looks like. It is crucial to develop a framework that supports providers to define the optimum performance of their estates needed to achieve best value, and ensure it reflects best practice. In this research the estate performance measurement and monitoring approaches for nine international healthcare organisations are reviewed, to identify the attributes and key performance indicators (KPIs) that are currently in use and to assess whether they can form the baseline for the approach to developing the framework. The findings show that each organisation employs a

list of KPIs that are aligned and tailored to their contextual priorities and policies. Despite the differences between them, the research reveals that there is a common set of attributes and KPIs that are applied by the majority of the healthcare organisations reviewed. The next step of the research seeks to widen the sample and explore the rationale for this through a pan EU survey and focus groups.

NHS Estates Quality and Sustainability

NHS trusts are told to prepare to evacuate hospitals with crumbling concrete

[News]

The BMJ, 2023

NHS England has written to trusts advising them to prepare evacuation procedures from clinical areas on their premises that are at risk of collapse from lightweight concrete.

<u>Crumbling NHS hospital buildings: why mental health is at the back of the funding queue</u>

Mental Health Practice, 2022

Dilapidated buildings and outdated designs unfit for modern nursing mean mental health trusts need urgent capital investment – but competition for money is fierce. When rain falls heavily on Lynfield Mount Hospital in Bradford, West Yorkshire, sewage swells up through its bathroom sinks, and seeps under doors and onto the wards.

Sustainable achievements and future aspirations in the NHS
British Journal of healthcare Management, 2018
In 2016/2017, NHS England alone spent £628 million on utilities.
In total, 87% of this bill (£544 million) was allocated to energy services, while a further £84 million was consumed by water use.
As daunting as these figures seem on paper, they present exciting opportunities for a sustainable future and NHS energy

and sustainability managers in particular. [...] Progress is also being made elsewhere in other avenues through the use of smart technologies (including smart buildings), such as: building energy management systems control, on-site power generation capacity, standardising combined heat and power facilities (as well as renewable forms of energy), and investing in workforce training. These innovations often require a cultural shift to take place in a healthcare setting, and this is where the importance of effective leadership comes to fruition.

Building information modelling to support maintenance management of healthcare built assets

Facilities, 2019

A comprehensive document analysis and a participatory case study was undertaken with a regional NHS hospital to review the type of information that can be used to better inform BAM decision-making to develop a conceptual framework to improve information use during the health-care BAM process, test how the conceptual framework can be applied within a BAM division of a health-care organisation and develop a cloud-based BIM application.

Roadmap layers and processes: resilient and sustainable care facilities

Engineering, Construction and Architectural Management, 2019 This paper suggests an original approach for the development of a roadmap for resilience and sustainability of health and social care facilities, and specifically of how to structure layers and processes, envisioning a more integrated development of service provision and infrastructure asset management.

NHS urgent facilities repairs: is your hospital on the critical list? The BMJ, 2017

As NHS funding over the past seven years has slowed to an historically low rate of around 1.2% a year on average, one tactic

to make ends meet has been to switch money from capital to revenue budgets to pay for the everyday costs of keeping services going. This has meant delayed spending on maintaining the infrastructure of the NHS estate—everything from buildings to equipment, IT, and lifts.

Sustainable management of NHS assets backlog maintenance

Built Environment Project and Asset Management, 2016 The major finding is that sustainable management of BM is achievable if there is a consistent, pro-active and long-term strategic approach where critical levels of BM are prioritised. Additional issues (i.e. appropriate methodology, performance metrics and links with clinical service delivery strategies) also need to be considered.

Food and Catering

<u>Providing a catering liaison service between inpatient families</u> and the hospital kitchen

British Journal of Healthcare Management, 2023 Jo Wray and colleagues use a case study to outline an innovative approach to hospital catering, proposing the introduction of a catering liaison role to improve patient nutrition, reduce length of stay and save resources.

Implementing Nutritional Strategies in the Workplace: Choices for NHS Organisations

Journal of Health Policy & Opinion, 2023

While better rota design, managed workloads, improved infrastructure, physical activity, psychological safety, and dignity at work are important determinants of employee health and well-being – access to a nutritious diet, water and education on healthy habits is a crucial component. Organisations including the National Health Service have a social responsibility to encourage healthier habits provide access to healthy eating

within their premises and even offer incentives, not only to the patients they serve but also to their staff. This article explores the simple interventions that have been shown to be effective- and links to their evidence.

Food, Aging, and Dementia: Exploring caterers' roles in elderly care homes nourishment.

Sheffield Hallam University, 2022

The overarching results of the research signpost to the following:

- There is a significant lack of education and / or training in effective Food and Beverage provision within the sector. Catering production and food service staff have indicated a desire and need for further training. There is a significant lack of funding for that education and training in the sector. There is a significant underspend on Food and Beverage provision within the publicly funded sector to ensure good, high quality, products.
- There are significant differences in understanding of the rôles of catering staff by nutrition and nursing staff. Catering staff do not feel valued or trusted by medical, dietetic, and nutritional staff. Several of the care homes are using antiquated and ineffective kitchen equipment.

Cooking without cookers/chefs: is it possible?

Clinical Nutrition, 2022

In an important recent guideline about hospital nutrition the word chef or cooker was never used, and the word "kitchen(s)" was used 15 times, most of them in a composite word "kitchen manager".

A study to explore hospice catering staff's experiences with palliative and dying patients

[Conference abstract]
BMJ Supportive & Palliative Care, 2021
Our findings are similar to those of Jors (2017)
study of domestic staff. We found that our catering staff have

regular patient contact and that they value time spent with patients. These interactions often go beyond addressing nutritional needs, even though this is not a formal part of their role. We will present suggestions for supporting staff when these conversations occur and suggestions for further research into this area.

Environmentally sustainable hospital foodservices: Drawing on staff perspectives to guide change

[Australia]

Sustainable Production and Consumption, 2021
The aim of this study was to explore the perspectives of staff working across the hospital food supply chain towards: (1) sustainable practices in hospital food provision; (2) existing barriers and enablers; and (3) recommendations for implementing sustainable foodservice practices in the future.

How might vegan food fit into the future of hospital catering? British Journal of Healthcare Management, 2019 No abstract.

Housekeeping, Domestic Services, Linen Services, Ancillary Staff

The application of the mobile application for the assessment of cleaning workers' exposure to cleaning products: a pilot study Annals of Work Exposures and Health, 2023

The CHaPEL app is a user-friendly immediate way to successfully collect exposure information using the barcodes of cleaning products. This tool could be useful for future epidemiological studies focused on exposure assessment with less interruption to the workers.

A performance measurement model for the housekeeping services in healthcare facilities

Facilities, 2022

The study identified and ranked 46 KPIs, which can be used to measure the performance of HK divisions of health-care facilities, in balanced scorecard perspectives. The findings also revealed that the KPIs determined using the model have a significant impact on implementing effective health-care HK services and could be used to measure both real and subjective cleanliness.

<u>The NHS's forgotten workforce—a historical essay by Jennifer</u> Crane

The BMJ, 2022

Porters, cleaners, receptionists, chefs, laundry workers, and other ancillary staff have represented a huge proportion of the NHS workforce since the service was founded. In 1949, domestic and maintenance staff represented 44% of the NHS workforce, administrative staff 7.1%, and professional and technical staff 3.5%. [...] While successive governments recruited ancillary workers, these staff often faced very poor working conditions and dismissive treatment in the hierarchies of medical spaces. Nonetheless, many ancillary workers have taken great pride and pleasure in their work, recognising themselves as critical to the patient experience.

<u>Cheap and Dirty: The Effect of Contracting Out Cleaning on Efficiency and Effectiveness</u>

Public Administration Review, 2019

Evidence for Practice

- Contracting out of public services, especially auxiliary services, is a key component of New Public Management because of the belief that it will lower costs and possibly increase quality.
- Economic theory predicts that when quality is hard to measure ex-post or hard to define ex-ante, suppliers may

reduce quality to maintain their own costs, as they are the residual claimant on any profit.

- We find evidence to support the quality shading hypothesis and the coupling theory. Hospitals contracting out cleaning services had lower levels of cleanliness and worse health-care outcomes as measured by hospitalacquired infections.
- Public service managers must be very careful when outsourcing services— even auxiliary services; some performance indicators should reflect aspects of the quality of the core service.

My Beautiful Laundrette? Reducing the infection risks associated with linen management

[Conference abstract]

BMJ Supportive & Palliative Care, 2022

Specialist IPC knowledge brought significant value to improving the care environment. It involved a multi-disciplinary approach. This integrated method of working developed a more accountable culture, with all staff understanding the need for change in order to protect vulnerable patients. The introduction of dipslide testing provides evidence that laundering processes are safe and effective. If audits fall below required standards, additional decontamination procedures are instigated. These improvements were achieved with minimal cost implications

Recycling in the NHS—where does the buck stop?

The BMJ, 2021

It was our housekeeper who stopped mid tracks and mentioned how she wished that the packaging she was throwing away (the plastic film around blood bottle trays, plastic trays, paper slips with the medical products, etc.) could be recycled. Once I had seen this, I couldn't unsee it. It was almost as if I had been sleepwalking and I suddenly saw our use and throw habits for what they were—neglectful and careless.

An Assessment of Health Care Supportive Services; Linen and Laundry Management in a Tertiary Care Hospital, Sri Lanka International Research Journal of Pharmacy and Medical Sciences, 2021

Gaps in structure included inadequate segregation and initial washing facilities as less than 65% of necessary facilities were available. Process showed many deficiencies in the segregation process, washing process, documentation practices, performance of outsourced laundry owners and supervision.

<u>Laundering single-use gowns in the event of critical shortage:</u> experience of a UK acute trust

The Journal of Hospital Infection, 2020

It was proposed that if the gowns were treated as fabric items, and they physically withstood the process, use of the hospital laundry system, which is well established in decontaminating healthcare linen, could be investigated. The hospital laundry has the advantage of allowing high throughput, with less 'hands-on' staff time compared with other disinfection methods such as ultraviolet radiation or hydrogen peroxide vaporization, as well as requiring less space.

From ward to washer: The survival of Clostridium difficile spores on hospital bed sheets through a commercial UK NHS healthcare laundry process

Infection Control & Hospital Epidemiology, 2018
Clostridium difficile spores are able to survive laundering through a commercial washer extractor and may be contributing to sporadic outbreaks of CDI. Further research to establish exposure of laundry workers, patients, and the hospital environment to C. difficile spores from bed sheets is needed.

The Views of Domestic Staff and Porters when Supporting Patients with Dementia in the Acute Hospital: An Exploratory Qualitative Study

Dementia, 2017

The study suggests the need for improving the dementia-related knowledge and skills of all non-clinical staff especially those new to the NHS. The impact of witnessing dementia symptoms and distress on emotional well-being requires further research so that ancillary staff can improve the hospital stay of patients with dementia.

<u>Tidying rooms and tending hearts: An explorative, mixed-methods study of hospital cleaning staff's experiences with seriously ill and dying patients</u>

Palliative medicine, 2017

Cleaning staff described interactions with patients as an important and fulfilling aspect of their work. About half of participants indicated that patients talk with them every day, on average for 1-3 min. Conversations often revolved around casual topics such as weather and family, but patients also discussed their illness and, occasionally, thoughts regarding death with cleaning staff. When patients addressed illness and death, cleaning staff often felt uncomfortable and helpless.

Outsourcing cleaning services increases MRSA incidence: Evidence from 126 english acute trusts

Social Science & Medicine, 2017

By linking data on MRSA incidence per 100,000 hospital beddays with surveys of cleanliness among patient and staff in 126 English acute hospital Trusts during 2010–2014, we find that outsourcing cleaning services was associated with greater incidence of MRSA, fewer cleaning staff per hospital bed, worse patient perceptions of cleanliness and staff perceptions of availability of handwashing facilities. However, outsourcing was also associated with lower economic costs (without accounting

for additional costs associated with treatment of hospital acquired infections).

'Time to clean': A systematic review and observational study on the time required to clean items of reusable communal patient care equipment

Journal of Infection Prevention, 2017

A limited volume of low-quality evidence indicates that increased cleaning times in hospitals can reduce the incidence of healthcare-associated infections (HCAIs). The mean 'time to clean' for care equipment ranged from 166.3 s (95% confidence interval [CI] = 117.8–214.7) for a bed frame to 29.0 s (95% CI = 13.4–44.6) for a blood pressure cuff.

Job Crafting and Identity in Low-Grade Work: How Hospital Porters Redefine the Value of their Work and Expertise

Vocations and Learning, 2017

This paper combines ideas from their seminal contribution with theories of 'job crafting' and identity to examine the agentic behaviour of employees in low-grade, 'dirty work' as they utilise their expertise and practices to (re)frame their occupational identities and challenge their prescribed job boundaries. The evidence for the paper comes from a qualitative study of hospital porters in the UK's National Health Service. It argues that this combined theoretical approach provides a potential research and employment framework to challenge the abstracted and stereotypical conceptions of the expertise related to low-grade jobs.

Environmental Impact, 'Net Zero', Greener NHS

Evaluating Actions to Improve Air Quality at University Hospitals
Birmingham NHS Foundation Trust
Sustainability, 2022

NHS service providers and leadership teams lack awareness of the most effective actions to adopt to address air quality impacts. There has been significant focus on generating evidence for interventions in other areas, including Air Quality Alert Systems, Promoting Active Travel, removal by urban forests, Low Emissions Zones, Cross-Organisational Collaboration and Research Communication and Engagement. These are typically achieved by changes implemented by local authorities and therefore considered beyond the health sector's control (beyond as a consultee). Changes to UK legislation adopted within the Environment Act 2021 will enable greater collaborative and partnership working, ensuring responsibility is shared across local government structures, and with relevant public bodies, including healthcare providers.

Realist evaluation of the implementation and impact of the NHS carbon reduction strategy in the UK

BMJ Open, 2021

Organisational factors, particularly Board leadership and internal implementation pathways, have a significant bearing on whether CRM are implemented or not. However, greater national support and guidance is needed for NHS organisations to effectively reduce their carbon emissions. Further cycles of this evaluation are necessary in multiple case study sites to illuminate the path to a net-zero NHS carbon footprint by 2045.

Building Performance Evaluation of a New Hospital Building in the UK: Balancing Indoor Environmental Quality and Energy Performance

Atmosphere, 2021

This paper reports on a holistic building performance evaluation covering aspects of indoor air quality, thermal comfort, lighting, acoustics, and energy use. It assesses the performance issues and inter-relationships between IEQ and energy in a new building on a hospital campus in the city of Bristol, United

Kingdom. The empirical evidence collated from this case study and the feedback received from the hospital staff help identify the endemic issues and constraints related to hospital buildings, such as the need for robust ventilation strategies in hospitals in urban areas that mitigate the effect of indoor and outdoor air pollution and ensuring the use of planned new low-carbon technologies.

<u>Transitioning to Environmentally Sustainable Health Systems:</u> The Example of the NHS in England.

Public Health Panorama, 2017

Lessons learnt: some aspects of the NHS experience may be transferable to other national health systems. These include the importance of manageable entry points and stakeholder engagement, how to promote change, the complementarity of top-down and bottom-up action, and the inextricability of the environmental, social and economic dimensions of sustainability in health systems.

Competency Frameworks

Facilities and Estates

Skills for Health, no date

The team is responsible for the safe, secure and comfortable day-to-day working environment, ensuring that properties, assets and services are fully compliant with health and safety and other legislation. They will ensure that levels of performance delivered exceed customer expectations within budget for the properties, assets and services.

<u>Competency-based training for the non-clinical workforce – A feasibility study, using a unique competency framework and career pathway</u>

Education for Primary Care, 2020

Five Community Education Provider Networks (CEPNs) in South London collaborated to deliver training using the competency framework developed by OHSEL. They recruited employees from community health and social care providers, with predominant interest from primary care. Training included Apprenticeships and CEPN-developed modular training. Results for this largely part-time workforce identified enthusiasm for learning; increased confidence and commitment; a desire for career progression and preference for flexible training with skills directly usable at work. Workplace findings included the need for manager training in coaching and mentoring to support employees implementing new skills, and willingness from clinicians and managers to embrace new roles. Feedback was overwhelmingly positive with outcomes used to develop on-line accredited training.

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