HORIZON

Monthly current awareness from Intelligence and Research

No 45. January 2014

This bulletin will cover externally published information on health and social care issues relating to people affected by cancer. Follow the links in the headlines to see the underlying content.

It is complementary to the **Daily News Digest**, and the **Monitor** available to Macmillan staff on the green rooms.

Chris Wilson 020 7840 7830 cwilson@macmillan.org.uk

Important items this month:

Four pieces of research funded by Macmillan this month.

Cancer carers overlooked by NHS despite providing care worth £14.5bn a year
The NHS is failing to identify and support people caring for a loved one with cancer – even though the economic value of the care they provide totals around £14.5 billion a year.

10,000 UK children living with cancer
There are almost 10,000 children in the UK currently living with a cancer diagnosis. This research reveals for the first time the number of children aged 0-14 with cancer in the UK, with around 20% more boys than girls affected. The figures also show almost half (47%) of all under-14s living with a cancer diagnosis were diagnosed at least five-years ago.

The next two seek explain differences in patient experience
Cancer patient experience, hospital performance and case mix: evidence from England
Patient case mix has only a small impact on measured hospital performance for cancer patient experience.
Future Medicine. 19 December

What explains worse patient experience in London? Evidence from secondary analysis of the Cancer Patient Experience Survey
Patients with cancer treated by London hospitals report worse care experiences and by and large these differences are not explained by patient case-mix or teaching hospital status. Efforts to improve care in London should aim to meet patient expectations and improve care quality.
BMJ Open. 3 January

Contents

NHS

Policy & politics

Delivering integration at pace and scale

This report contains the transcript of the Reform-Novo Nordisk seminar on "Delivering integration at pace and scale" with Bill McCarthy, National Director of Policy at NHS England, in October 2013. The aim of the seminar was to explore how policymakers can facilitate integration that benefits patients.

Reform. January

NHS co-payments: how popular are they among healthcare users?

This report discusses the results of a survey of patients and their opinions on the use of co-payments and top-up fees in the NHS.

The Patients Association. January

Health inequalities in the EU: final report of a consortium

This report provides an outline of new evidence on health inequalities in the European Union and the policy response at EU and national level to health inequalities since 2009.

London Health Observatory. December

10,000 UK children living with cancer

There are almost 10,000 children in the UK currently living with a cancer diagnosis, according to new figures by Macmillan Cancer Support and the National Cancer Intelligence Network. This research reveals for the first time the number of children aged 0-14 with cancer in the UK, with around 20% more boys than girls affected. The figures also show almost half (47%) of all under-14s living with a cancer diagnosis were diagnosed at least five-years ago.

Macmillan Cancer Support. 13 December

Global cancer cases to rise to 19 million a year by 2025

A global focus on cancer prevention will be needed to help stem the continued rise in cancer cases around the world, an international organisation reports. IARC predict that new cancer cases will rise to 19.3 million per year by 2025. Looking at 28 types of cancer across 184 countries, IARC's GLOBOCAN 2012 database shows there were 14.1 million new cancer cases in 2012, compared with 12.7 million in 2008.

International Agency for Research on Cancer. 12 December 2013

The national cancer strategy: 3rd annual report

The third annual Improving Outcomes: A Strategy for Cancer report, in partnership with NHS England and Public Health England, reports on: significant developments in cancer screening - particularly on the first phase of introducing Bowel Scope Screening; activity to promote earlier diagnosis of symptomatic cancers through the Be Clear on Cancer; campaigns and the associated work with primary and secondary care; progress in ensuring better access for all to the best possible treatment; significant developments in the collection and reporting of new datasets and the analysis of information to drive improvements and inform patients.

Departm December

Essential reading for smart spending: Dr Foster hospital guide 2013

This report examines how financial austerity is affecting the way money is spent on hospital treatments; the impact of drug and alcohol problems on patients and hospitals; the quality of care at weekends; and the measurement of hospital mortality. The data has been presented in a series of posters which aim to celebrate good care and highlight areas of improvement.

Dr Foster Intelligence. December

Study highlights varying cancer survival rates across Europe

Cancer survival rates are continuing to improve in England, according to the results from a Europe-wide collaborative project. But despite major improvements during the first decade of this century, cancer survival in England lags behind countries with the best survival rates, such as Sweden, Norway and Finland. The analysis was drawn from data of survival for more than 10 million cancer patients from 29 countries diagnosed between 2000 and 2007 and followed up to 2008

December

The pharmaceutical price regulation scheme 2014

This voluntary scheme will provide assurance on almost all of the branded medicines bill for the NHS. The bill will stay flat over the first 2 years of the scheme and will grow slowly after that. The industry will make payments to the Department of Health if NHS spending on branded medicines exceeds the allowed growth rate.

Department of Health. December

'Present, powerful and involved': designing HEE's new advisory forum

This report is a summary of an event which discussed the creation of a new patient advisory forum. It summarises the key messages from the event, identifying areas of consensus and proposed solutions, and outlining next steps to help us design the patient advisory forum.

Health Education England. December

Commissioning

NHS services, seven days a week - costing seven day services

This report looks at the financial implications of seven day services for acute emergency and urgent services and supporting diagnostics.

Healthcare Financial Management Association. December

Planning and delivering service changes for patients

This guidance is designed to support CCGs and NHS England with the planning, development and assurance of proposals for major service change and reconfiguration. It provides a high level process, sets out good practice, and explains how to assess proposals against the Government's 'four tests'.

NHS England December

Towards whole person care

This paper reviews the case for change in the English health and care system and considers how to move towards a 'whole person care' approach. It sets out broad themes on creating a health and care system that is fit for the future. It makes a case for a number of person-centred guarantees at the heart of the vision for whole person care, focused on people with long-term conditions and older people.

Institute for Public Policy Research. December

Quality

360 degrees of health data: harnessing big data for better health

The objectives of the conference were to hear about the evolving data boom and its impact on the biopharmaceutical industry and the NHS, highlight data needs and the opportunities to improve R&D productivity, and drive forward health research excellence through partnership working for patient benefit. This report contains a summary of the proceedings.

Association of the British Pharmaceutical Industry. January

Monitoring rather than treatment recommended for some men with prostate cancer

Men with less aggressive forms of prostate cancer should be offered regular checks rather than treatment in a bid to avoid unnecessary surgery or radiotherapy. Doctors treating men with "intermediate" or "low" risk prostate cancer should consider offering "active surveillance" instead of standard treatment options. Prostate cancer can be slow growing and many men will not be harmed by the cancer over the course of their lifetime.

NICE. 8 January 2014

Developing measures of people's self-reported experiences of integrated care

This report includes a set of 18 questions developed and tested with people from a wide range of backgrounds and with experience of using different health and social care services. The team's recommendation is to introduce a small number of these questions into relevant national surveys to help local providers and commissioners see what is working well and what needs to change.

Picker Institute. January

Options appraisal on the measurement of people's experiences of integrated care

This report recommends that integrated care should be measured in a way that combines information from existing national health and social care data sets with feedback directly from patients, service users and carers. It concludes that a new, bespoke validated survey of users of health and social care which captures experiences of care coordination across services would be hard to justify in terms of cost, burden, and time to develop and implement.

Picker Institute. January

Releasing Time to Care: making our priorities possible

This report of highlights the programme's achievements along with the critical success factors and challenges faced. It discusses the implementation of the programme along with how it supported the integration of health and social care.

January

Variations in outcome and costs among NHS providers for common surgical procedures: econometric analyses of routinely collected data

This study aimed to identify variation in patient-reported outcomes (PROMs) across hospitals; assess the relationship between the cost and outcomes among NHS hospitals for these procedure; and determine the extent to which variations in outcomes and costs are due to differences in hospital performance.

National Institute for Health Research. January

Beating the effects of winter pressures

This briefing paper aims to help explain why there is increased pressure on the NHS in winter, the impact this has on NHS services, and sets out why a longer term solution is needed.

British Medical Association. December

Cancer patient experience, hospital performance and case mix: evidence from England

Research funded by Macmillan
This study aims to explore differences between crude and case mix-adjusted estimates of hospital performance with respect to the experience of cancer patients. It analyzed the

Cancer Patient Experience Survey. Logistic regression analysis was used to predict hospital performance for each of the 64 evaluative questions, adjusting for age, gender, ethnic group and cancer diagnosis. The degree of reclassification was explored across three categories (bottom 20%, middle 60% and top 20% of hospitals). Results: There was high concordance between crude and adjusted ranks of hospitals. Across all questions, a median of eight hospitals moved out of the extreme performance categories after case mix adjustment. In this context, patient case mix has only a small impact on measured hospital performance for cancer patient experience.

Future Medicine. 19 December

Carbon footprint update for NHS in England 2012

This report shows that the NHS carbon footprint in England is 25 million tonnes of carbon dioxide equivalents. The footprint is composed of procurement (61%), building energy (17%), travel (13%) and commissioning (9%).

Sustainable Development Unit. December

Using clinical communities to improve quality

This report introduces the concept of the clinical community approach which comprises a core team that supports site teams to make change happen locally. It presents 10 key lessons from the programme about when to use a clinical community, how to make it work, and how to avoid potential pitfalls.

The Health Foundation. December

Hard truths: essential actions

In November 2013, the government published its full response to the Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry by Robert Francis QC. The focus of this briefing is on bridging the gap between the actions set out by the government and their practical application by people working in the service. It suggests to policy makers how the continual reduction of harm can be achieved by measuring safety comprehensively and by building the capability of individuals, organisations and systems.

The Health Foundation. December

Workforce

Emergency medicine - background to HEE proposals to address workforce shortages

The Health Education England Board has agreed joint proposals from HEE and The College of Emergency Medicine to address workforce shortages in emergency medicine. This report contains proposals and recommendations for improvements in the future workforce of emergency departments to ensure that patients receive consistent, high quality, safe and effective care.

Health Education England. December

Investing in people: for health and healthcare

This workforce plan sets out the investments HEE intends to make in education and training programmes to begin in September 2014.

Health Education England. December

Primary/community care

Better Care Fund guidance

The Better Care Fund will provide £3.8 billion to local services to give elderly and vulnerable an improved health and social system. This guidance provides local areas with the detail they need to complete plans for how they will use their portion of the fund to join up health and care services around the needs of patients, so that people can stay at home more and be in hospital less.

Local Government Association. December

700 extra patients diagnosed with lung cancer as a result of “Be Clear on Cancer” campaign

Results from Public Health England’s “Be Clear on Cancer” campaign on lung cancer has revealed that around 700 extra patients were diagnosed with lung cancer, and 300 patients received surgery, after presenting with lung cancer symptoms at their local GPs. The campaign ran throughout England from May-June 2012. The campaign, supported by Cancer Research UK, NHS England and the Department of Health also resulted in 400 more patients being diagnosed with lung cancer at an earlier stage and a smaller proportion of patients being diagnosed at a late stage.

December

Public Health

Behaviour change: individual approaches

This guidance makes recommendations on individual-level interventions aimed at changing health-damaging behaviours among people aged 16 or over. It includes a range of approaches, from single interventions delivered as the opportunity arises to planned, high-intensity interventions that may take place over a number of sessions. The recommendations are inter-linked and should be implemented together. They cover: policy and strategy, commissioning, planning, delivery, training and evaluation of individual-level behaviour change interventions. They also cover behaviour change techniques, the maintenance of change and organisational and national support.

NICE. January

Inequalities

Ethnic differences in breast cancer rates linked to lifestyle

Differences in lifestyle and reproductive factors are the main reasons behind lower breast cancer rates in South Asian and black women. Breast cancer incidence rates in England are lower in black and South Asian women compared with white women, but the reasons for these differences have not been fully understood – until now. South Asian and black women drink less alcohol and have more children than white women – and both these factors influence the risk of developing breast cancer. But when these, and other lifestyle and reproductive factors were excluded from the analysis, the risk of developing breast cancer was found to be similar for women of all ethnic groups.

British Journal of Cancer. 8 January 2014

Improving access to heath care for gypsies and travellers, homeless people and sex workers: an evidence-based commissioning guide for clinical commissioning groups and health and wellbeing boards

This guidance argues that radical changes are needed to meet the healthcare needs of vulnerable groups. It makes recommendations towards more communication and joined up working between health, social care and voluntary services targeted at marginalised groups; and greater integration between health and housing services to identify and treat health problems associated with poor living conditions.

Royal College of General Practitioners. December

Governance for health equity in the WHO European region

This report analyses why policies and interventions to address the social determinants of health and health inequities succeed or fail. It also discusses important features of governance and systems for service delivery that increase the likelihood of success in reducing inequities. The report presents a systems checklist for governing for health equity as a whole-of-government approach. This is intended for further discussion and as a framework to support countries in strengthening their governance for health equity in practice, through action on the social determinants of health.

World Health Organization. December

Social Care

Cancer carers overlooked by NHS despite providing care worth £14.5bn a year

The NHS is failing to identify and support people caring for a loved one with cancer – even though the economic value of the care they provide totals around £14.5 billion a year. Over a third of carers who were with their loved one when they were diagnosed were not asked whether they would be providing care. More than two fifths say the health professional didn't give them any information or advice about support available to them.

Macmillan Cancer Support. 9 January

Changes in the pattern of social care provision in England: 2005/6 to 2012/13

This report finds that half a million older and disabled people who would have received social care five years ago, now receive no local support. It calls on ministers to re-think a proposal to restrict who gets support and address the funding crisis in local care.

Care & Support Alliance December

The case for care leave: families, work and the ageing population

This report calls for a legal right to a minimum of five days paid 'care leave' and for a debate on rights to longer periods of leave to care for disabled, older seriously or terminally ill loved ones.

Carers UK. December

Inquiry into the State of Social Work report

Published on behalf of the All Party Parliamentary Group on Social Work this report outlines the pressures facing the profession. It contains a series of recommendations to help address these challenges. It heard testimonies from experts and evidence from frontline social workers about unmanageable caseloads, rising numbers of children entering care and IT systems that prevent social workers from spending time with vulnerable people.

British Association of Social Workers. December

Avoiding unhappy returns: radical reductions in readmissions, achieved with volunteers

This research finds that almost 150,000 older people had no support on returning home from hospital and for those that did get some kind of help, approximately 20 per cent didn't receive continuing support. This report contains a summary of the achievements of the Hospital 2 Home scheme in Leicestershire service in it's first year.

Royal Voluntary Service. December

Independent living fund

The independent living fund was originally set up in 1988 as a national resource dedicated to the financial support of disabled people, enabling them to choose to continue living in the community rather than move into residential care. This note provides a short history of the ILF and an update on its current status.

House of Commons Library. December

Palliative/end of life care

Life after death: six steps to improve support in bereavement

This report outlines steps which the authors believe would bring benefits to individuals and to society as a whole: reducing the use of acute health and social care services, lessening the number of days lost to the economy, and improving the wellbeing of those facing such a significant change in their lives. It includes a call for clarity about who is responsible locally for commissioning and providing bereavement support, with better coordination and information about services.

Dying Matters. January

Early Specialty Palliative Care — Translating Data in Oncology into Practice

Palliative care suffers from an identity problem. Seventy percent of Americans describe themselves as “not at all knowledgeable” about palliative care, and most health care professionals believe it is synonymous with end-of-life care. This perception is not far from current medical practice, because specialty palliative care — administered by clinicians with expertise in palliative medicine — is predominantly offered through hospice care or inpatient consultation only after life-prolonging treatment has failed. Limiting specialty palliative care to those enrolled in hospice or admitted to the hospital ignores the majority of patients facing a serious illness, such as advanced cancer, who have physical and psychological symptoms throughout their disease. To ensure that patients receive the best care throughout their disease trajectory, we believe that palliative care should be initiated alongside standard medical care for patients with serious illnesses.

New England Journal of Medecine. 12 December

Blogs and Opinion

Removing the barriers to integrated care

The momentum behind integrated care has increased during 2013. Welcome as these developments are, many barriers stand in the way of translating policy aspirations into practice. While some of these barriers can only be tackled at a local level, others require changes in government policy if integrated care really is to move forward at the scale and pace demanded by current financial and service pressures.

Chris Ham. Kings Fund. January

Fasten your seatbelts for integrated care

It would be wrong to conclude that integrated care doesn't work. A more accurate conclusion would be that it has never been tried. The pooling of budgets may be necessary but is not sufficient to make any difference. In some ways it makes things worse: Transforming Your Care, Northern Ireland's blueprint for the future, promised to move care into the community, with the consequent closure of around half the care homes run by the state. As soon as the homes were named a storm of protest burst around the head of the health minister, Edwin Poots, who was forced to retreat.

Nigel Hawkes. BMJ. 16 December

How do choice and competition drive quality in primary care?

Comparing the rates of people switching GP practices with people switching banks, Darshan examines whether we are maximising the potential for choice and competition to drive quality in primary care.

Darsheen Patel. Health Foundation. 12 December

What can useful bureaucracy in the NHS achieve?

Bureaucracy's bad name in the press is somewhat out-of-sync with the reality on the ground. The cartoon image of a nurse struggling under her/his own weight of paperwork and bemoaning all the form-filling she/he needs to do is shattered by our finding that clinical staff think two thirds of the data and information they collect and process is useful and relevant to patient care. Whether for protecting patient safety on the ward, or detecting patterns of diseases, bureaucracy in its broadest sense is actually pretty darn useful.

Jenny Ousbey. The Guardian. 6 December

Cuts to the Office for National Statistics will damage the health of the nation

We need these outputs to ensure we fully understand the needs, experiences, and outcomes of people with cancer. We urge the government and the Office for National Statistics to look beyond short term savings and consider the full impact of the proposed

cuts. Hawkes says the loss of these crucial data would amount to cultural vandalism of “the most damaging kind.” The potential damage to our understanding of the health of our nation is even more concerning.

Mike Hobday. BMJ. 4 December

Technology is key to unlocking the full value of NHS data for patients

For many people bureaucracy is a dirty word. It speaks of needless box-ticking exercises and pointless form filling. While that can be the case, the NHS Confederation’s recent report, Challenging bureaucracy, commissioned by the Secretary of State for Health, points out that bureaucracy, which includes recording, collecting and reporting information, is an essential part of any effective healthcare system. Much of the data derived from such processes is really valuable in helping clinicians to better understand the care they deliver.

Simon Pleydell. NHS Confederation. 4 December

My report card on the state of innovation in the English National Health Service

In reality, the future health and care system will need a combination of strategy, service and process innovations to deliver its quality and productivity challenges. On one hand, innovation in the current NHS context has to deliver more than small scale process changes. On the other hand, if we just concentrate on large dramatic changes, there is a risk that we will miss the incremental impact of multiple small changes at the frontline of care.

NHS Improving Quality. Helen Bevan. 15 November

Clinical research

Macmillan funded research or researcher

Do people with dementia die at their preferred location of death? A systematic literature review and narrative synthesis

Place of death is an important component of the quality of a person's death. The aim of this study was to undertake a systematic review and narrative synthesis of the literature concerning place of death of people with dementia and the preferences for location of death of people with dementia as well as family carers and healthcare providers preferred location of death for patients with dementia.

Age and Ageing. 9 January

What explains worse patient experience in London? Evidence from secondary analysis of the Cancer Patient Experience Survey

Patients with cancer treated by London hospitals report worse care experiences and by and large these differences are not explained by patient case-mix or teaching hospital status.

Efforts to improve care in London should aim to meet patient expectations and improve care quality.

BMJ Open. 3 January

Prevalence and predictors of transition to a palliative care approach among hospital inpatients in England

There is a need for discussion of the meaning, and operationalization, of palliative care transitions if UK policy to increase the extent of transitions is to be enacted. This study has implications internationally, given the increased global focus on the role of the acute hospital in palliative care.

Journal of Palliative Care. 2 January

The psychological experience of living with head and neck cancer: a systematic review and meta-synthesis

The articles focused on the experience of having HNC, the experience of treatments and the role of information. Our synthesis identified six core concepts-uncertainty and waiting, disruption to daily life, the diminished self, making sense of the experience, sharing the burden and finding a path.

Psychooncology. 2 January

Lessons learnt recruiting to a multi-site UK cohort study to explore recovery of health and well-being after colorectal cancer (CREW study)

The UK leads the world in recruitment of patients to cancer clinical trials, with a six-fold increase in recruitment during 2001-2010. However, there are large variations across cancer centres. This paper details recruitment to a large multi-centre prospective cohort study and discusses lessons learnt to enhance recruitment.

BMC Medical Research Methodology. 1 January

A UK survey of the impact of cancer on employment

Improvements in cancer detection and treatment and an increase in retirement age mean more people may experience cancer during their working lives. This is one of the largest UK registry-based surveys on this subject. Following treatment for cancer, there were significant falls in full-time working and hours worked. Just under half the sample discussed employment issues with their treatment team, and these participants worked significantly more hours. This indicates scope for improvement such as encouraging health professionals to raise work-related issues within time-limited consultations.

Occupational Medicine. 26 December

A time to weep and a time to laugh: humour in the nurse-patient relationship in an adult cancer setting

The literature highlights the value of humour in health-care settings. Humour impacts on the physiological, psychosocial and cognitive well-being of a person. The diagnosis of cancer is extremely stressful, and treatments are difficult. Patients and nurses may use humour as a

coping mechanism to contend with the stresses caused directly or indirectly by cancer. This study investigated the use of humour during interactions between patients and nurses in an adult cancer ward. The benefits of humour are recognised by both adult cancer patients and nurses. A deeper understanding of patient and nurse perceptions of the use of humour can inform strategies for its therapeutic use in the clinical setting.

Supportive Care in Cancer. 18 December

The use of mindfulness-based cognitive therapy for improving quality of life for inflammatory bowel disease patients: study protocol for a pilot randomised controlled trial with embedded process evaluation

Inflammatory bowel disease is a chronic condition with an unpredictable disease course. Rates of anxiety and depression among IBD patients in relapse as well as in remission are higher than in the general population. The outcomes of this study will help define the barriers, uptake and perceived benefits of MBCT program for IBD patients. This information will enable the design of a full-scale study assessing the effect of MBCT on quality of life for IBD patients.

Trials. 17 December

Could triaging family history of cancer during palliative care enable earlier genetic counseling intervention?

Patients are commonly referred to cancer genetics services when all affected family members are deceased. This makes genetic testing and risk assessment more difficult, reducing the benefit from screening and prophylactic treatment. Using a simple "3, 2, 1" family rule in cancer care and particularly in palliative care could enable earlier cancer genetic risk assessment for unaffected relatives, improving the potential to benefit from targeted screening and intervention.

Journal of Palliative Medicine. 12 December

Place of death and end-of-life transitions experienced by very old people with differing cognitive status: Retrospective analysis of a prospective population-based cohort aged 85 and over

Despite fast-growing 'older old' populations, 'place of care' trajectories for very old people approaching death with or without dementia are poorly described and understood. Most very old community-dwelling individuals, especially the severely cognitively impaired, died away from home. Findings also suggest that long-term care may play a role in avoidance of end-of-life hospital admissions. These results provide important information for planning end-of-life services for older people across the cognitive spectrum, with implications for policies aimed at supporting home deaths.

Palliative Medicine. 6 December

Integrating patient reported outcomes with clinical cancer registry data: a feasibility study of the electronic Patient-Reported Outcomes From Cancer Survivors (ePOCS) system

Routine measurement of Patient Reported Outcomes (PROs) linked with clinical data across the patient pathway is increasingly important for informing future care planning. The innovative electronic Patient-reported Outcomes from Cancer Survivors (ePOCS) system

was developed to integrate PROs, collected online at specified post-diagnostic time-points, with clinical and treatment data in cancer registries. The informatics underlying the ePOCS system demonstrated successful proof-of-concept--the system successfully linked PROs with registry data for 100% of the patients. The majority of patients were keen to engage. ePOCS can help overcome the challenges of routinely collecting PROs and linking with clinical data, which is integral for treatment and supportive care planning and for targeting service provision.

Journal of Medical Internet Research. 5 December

Physicians' experiences and perspectives regarding the use of continuous sedation until death for cancer patients in the context of psychological and existential suffering at the end of life

Physicians in our study used continuous sedation until death in the context of psychological and existential suffering after considering several pharmacological and psychological interventions. Further research and debate are needed on how and by whom this suffering at the end of life should be best treated, taking into account patients' individual preferences

Psychooncology. 5 December

End-of-life care and achieving preferences for place of death in England: Results of a population-based survey using the VOICES-SF questionnaire.

Health policy places emphasis on enabling patients to die in their place of choice, and increasing the proportion of home deaths. In this article, we seek to explore reported preferences for place of death and experiences of care in a population-based sample of deaths from all causes. More work is needed to encourage people to talk about their preferences at the end of life: this should not be restricted to those known to be dying. Increasing knowledge and achievement of preferences for place of death may also improve end-of-life care.

Palliative Medicine. 29 November

Other research

'Piggy-backing proteins' could kill cancer cells

Metastatic cancer is responsible for 90% of cancer-related deaths, and currently, we have only limited ways to stop the spread of blood-borne cancer cells. This study made use of two proteins normally found on the surface of a type of white blood cell called “natural killer cells” which kill abnormal and infected cells. In the laboratory, these two proteins were mixed with human blood and stuck to other types of white blood cells that could target cancerous cells. These “retrofitted” white blood cells were then injected into mice that had been exposed to the type of abnormal cells associated with colon and prostate cancer in humans. Encouragingly, a significant number of the cancer cells died.

PNAS. 6 January

Deaths from oesophageal cancer up by almost 50 per cent in last 40 years

The number of people dying from oesophageal cancer – cancer of the gullet or food pipe – has risen by 49 per cent in the last 40 years according to new figures. The latest figures

show around 7,600 people (13 in every 100,000) die each year from oesophageal cancer, compared to around 3,800 in 1971 (eight in every 100,000). For men, death rates have jumped by 65 per cent since the 1970s. But the increase is much smaller for women, with rates rising by nine percent.

Cancer Research UK. 6 January

Genetic profiling tracks progression from manageable blood cancer into deadly disease

Genetic profiling has painted the clearest picture yet of how a type of blood cancer – follicular lymphoma – develops and changes from a manageable disease into an aggressive cancer, offering new targets for treatment. Researchers sequenced the DNA of a patient's follicular lymphoma over the course of their cancer. The team used the latest technology to catalogue the genetic changes in a patient's disease as it progressed and found a number of gene mutations responsible for the onset of the disease. They also identified some of the key changes that drive the disease towards a more aggressive form. Crucially, these findings provide a number of new targets for treatment that may stop follicular lymphoma from developing resistance to therapy or becoming aggressive.

Nature Genetics. 22 December

Cancer death rates drop by 20 per cent over 20 years

The death rate from cancer has dropped by more than a fifth since the 1990s. In 1990, 220 in every 100,000 people died of cancer. Thanks to research improving the outcome for patients, this fell overall by 22 per cent to 170 per 100,000 in 2011. Research has proved to be the key factor in reducing the number of lives lost to cancer, with improved knowledge about preventing the disease, surgical techniques, precisely targeted radiotherapy and more effective drugs all boosting the outcome for patients.

Cancer Research UK. 18 December

Drug cuts breast cancer cases by more than 50 per cent in high risk women

Taking the breast cancer drug anastrozole for five years reduced the chances of post-menopausal women at high risk of breast cancer developing the disease by 53 per cent compared with women who took a placebo. The study looked at almost 4,000 postmenopausal women at high risk of breast cancer with half being given 1mg of anastrozole daily and half given a placebo. In the five years of follow up 40 women in the anastrozole group developed breast cancer compared to 85 women in the placebo group.

Lancet. 12 December

New tumour suppressor gene discovered

A gene that is switched off in around one per cent of all cancers could hold a vital clue to new treatments. Scientists found that inactivation of the gene - called CUX1 - triggers a biological pathway that increases tumour growth. Drugs currently in development that block this pathway could lead to a new therapy for people whose tumours have the inactivated gene.

Nature Genetics. 8 December