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APPTG Annual Conference 2016

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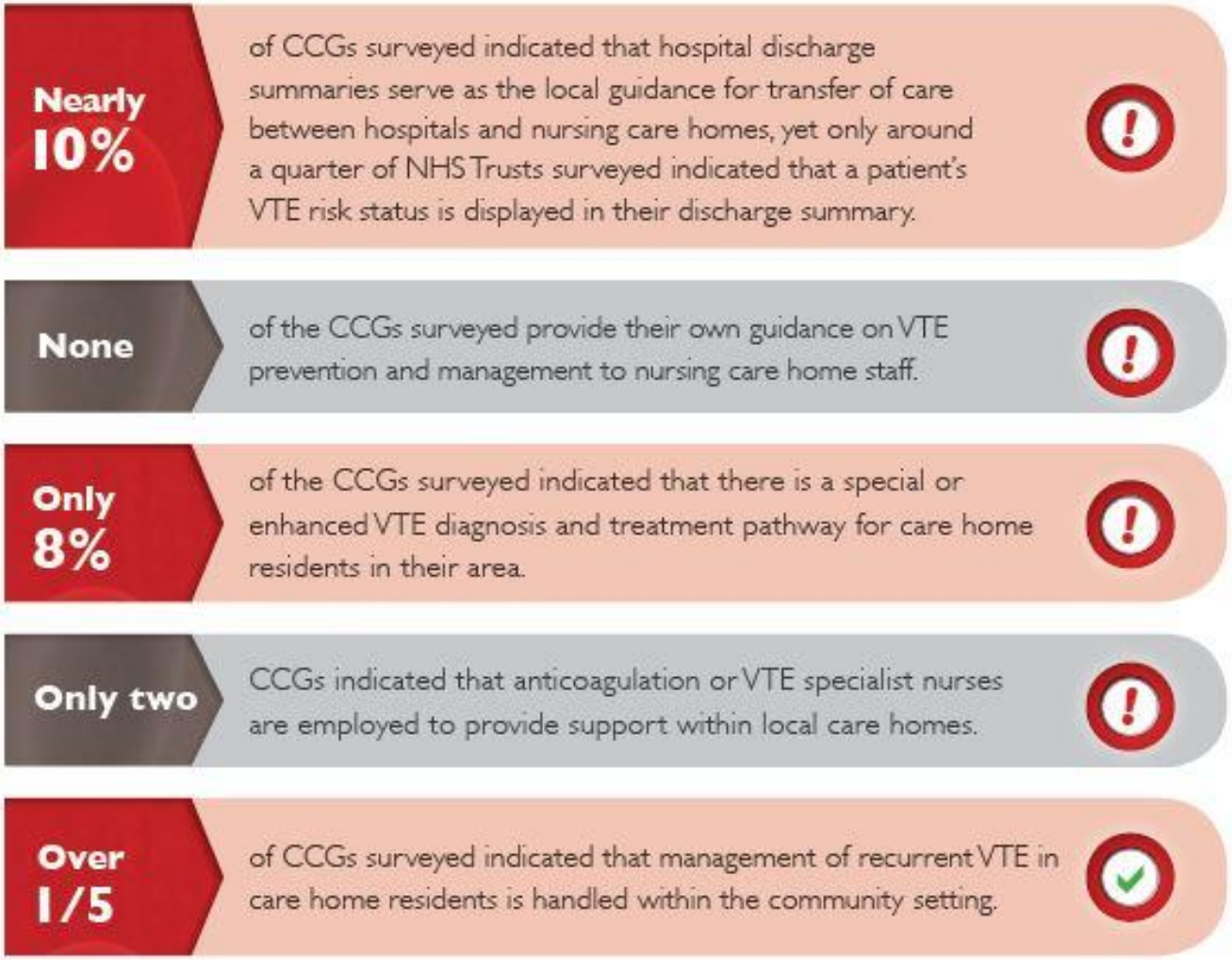
The Prevention and Management of VTE in Care Homes: Current Standards in England



VTE in Cancer Patients: Key findings for 2016

Cancer and VTE Diagnosis

The number of patients diagnosed with both cancer and VTE has remained relatively constant over the previous three years; averaging around 2.4% across England.

Incidence and Variation

The South of England region has an incidence rate of 2.2% and the North of England has a significantly higher rate of 2.6%.

Mortality

On average, 4,047 patients who die of cancer in England and Wales each year also have VTE listed on their death certificate as a cause of death. The average annual increase in cancer deaths where VTE is implicated is over four times higher than the average annual increase in overall cancer deaths.

VTE Cancer Policies

Only 35% of Trusts have a dedicated policy or pathway for the management of suspected VTE in patients receiving chemotherapy.

2016 Annual Review: Key signs of progress

92% of Trusts stated they have in place a written policy for preventing and also managing the risks of VTE for adult hospital admissions in line with NICE Quality Standard 3.

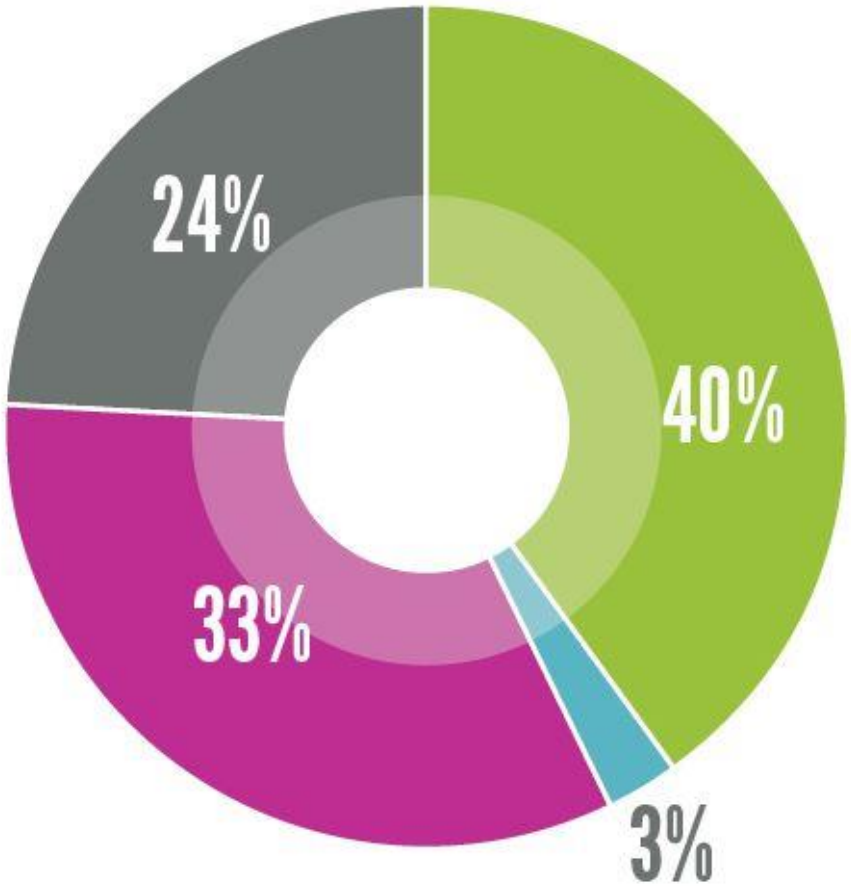
92% of CCGs have clearly mandated in their providers' service contracts that failure to comply with best practice in VTE prevention will result in sanctions.

Only 7% of Trusts indicated that their commissioners had imposed a sanction on them for failing to deliver the national VTE risk assessment threshold.

77% of Trusts have developed and distribute their own patient information leaflets on VTE prevention.

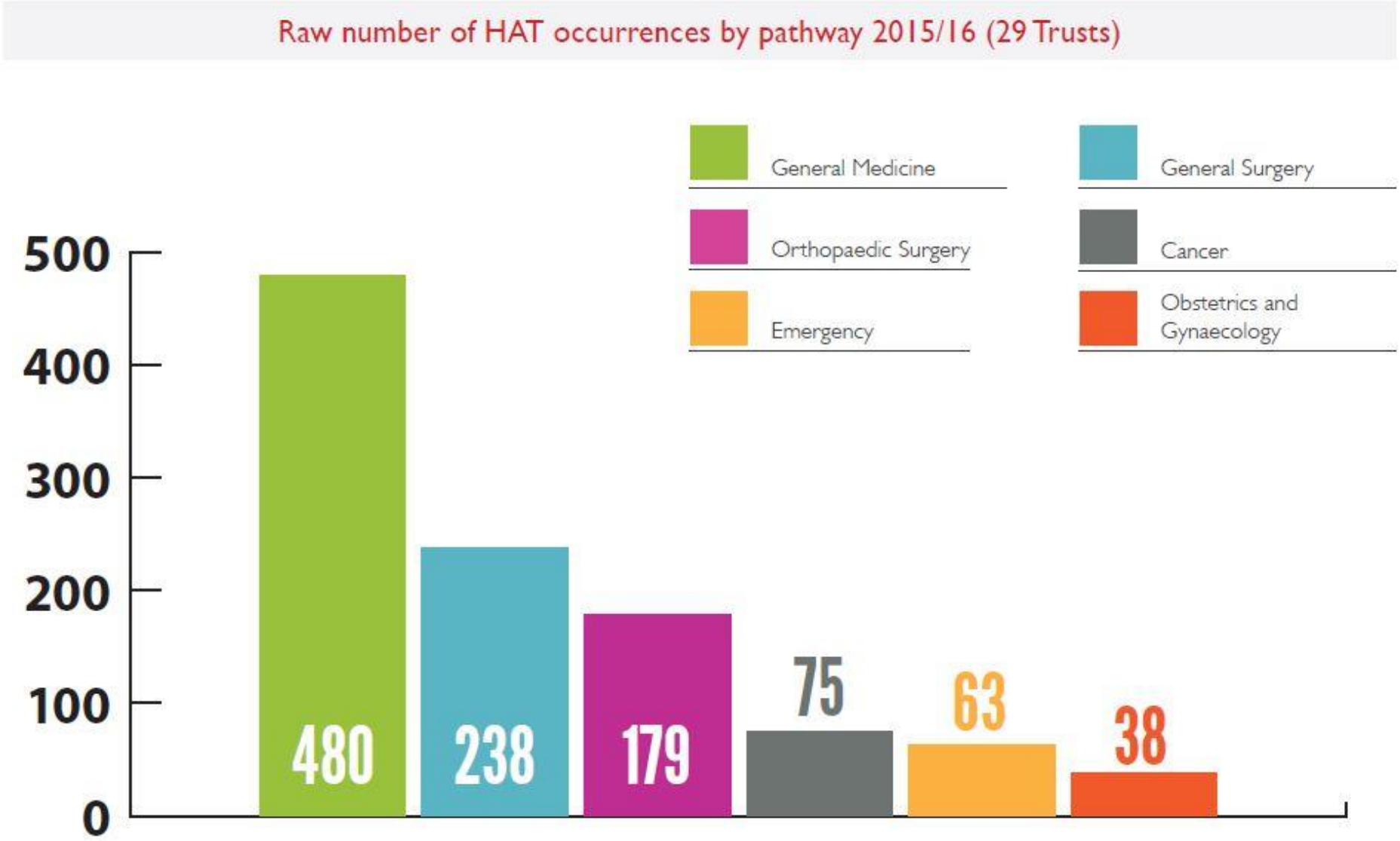
Root Cause Analysis Reporting

Recorded number of HAT and number of RCA performed (1 April 2015 – 31 March 2016)

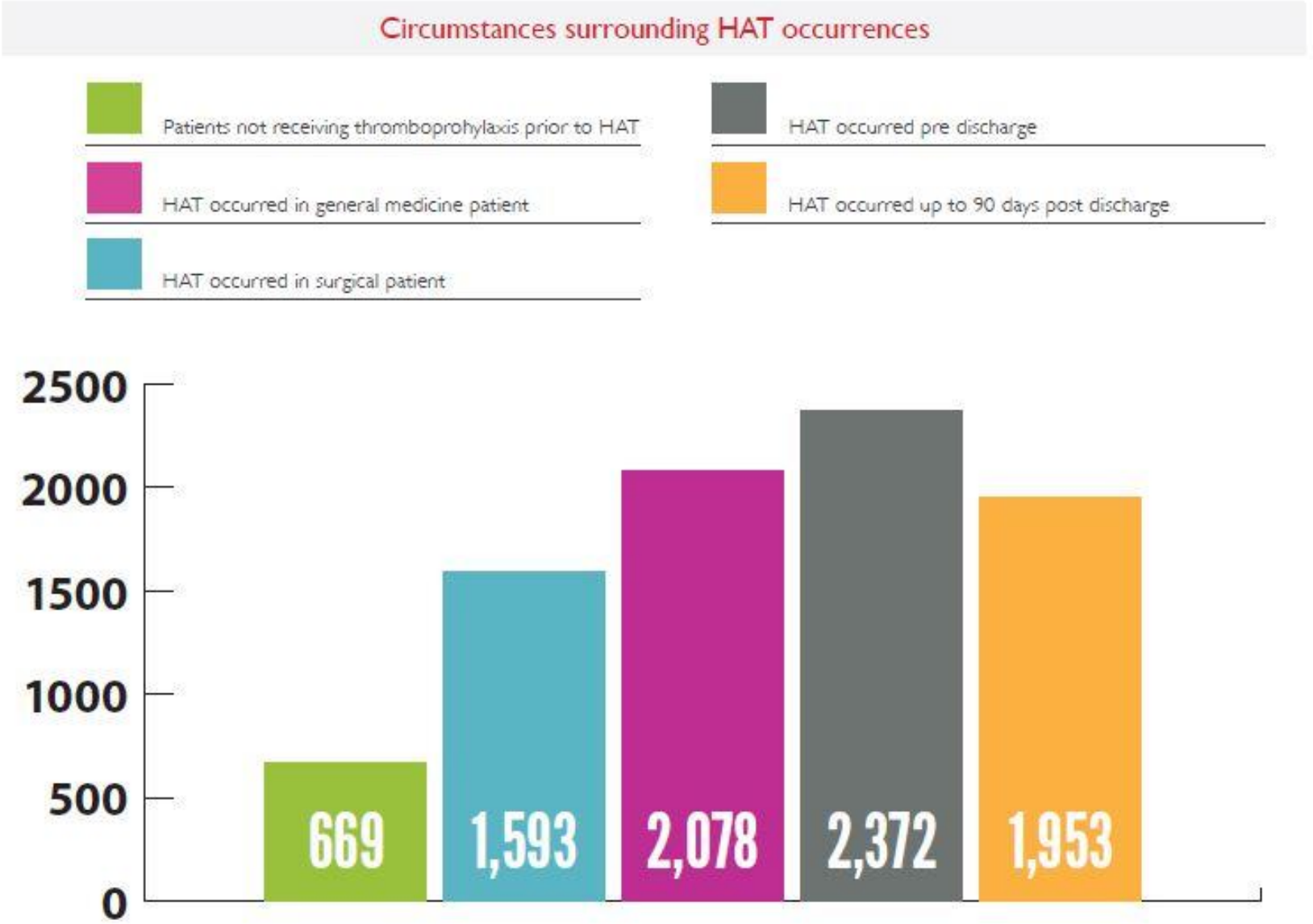


- The recorded numbers of HAT match the numbers of RCA performed for each quarter
- The recorded numbers of HAT match the numbers of RCA performed for all except one quarter
- The recorded numbers of HAT do not match the numbers of RCA performed for two or more quarters
- Information not available

HAT Occurrences: 2015/16



HAT Occurrences: 2015/16



Occurrence of VTE in the Community

About 1/3 of admissions for VTE occurring in the community were for patients with a previous hospital stay up to 90 days prior.

Recommendations for 2017

1. NICE Clinical Guideline 92 should be updated to include strengthened wording around the importance of verbal discussions on VTE risk with patients and learning from previous hospital associated thrombosis occurrences through Root Cause Analysis reporting.

2. CCGs should set local CQUIN goals for Root Cause Analysis reporting which specify that reports should note the pathway in which hospital associated thrombosis occurred and what if any thromboprophylaxis patients were receiving prior to the occurrence of hospital associated thrombosis.

3. Hospitals should move to electronic patient record systems which make Root Cause Analysis reports readily accessible.

4. Trust Medical Directors should undertake an annual review of Root Cause Analysis reports with their CCGs to determine which pathways hospital associated thrombosis is most commonly occurring in, and develop pathway-specific VTE prevention policies as necessary.

5. Chemotherapy and cancer clinical nurse specialists should be upskilled on cancer associated thrombosis in order to take ownership of VTE prevention in patients undergoing cancer treatment.

6. Hospital discharge summaries should standardly include a distinct section for VTE risk, indicating a patient's risk level and steps that should be taken within the community to manage this risk.

7. CCGs should develop and enforce clear local transfer of care protocols for community management of VTE in patients discharged from hospital.

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NHS England

Hospital Associated Thrombosis: the current situation in England

Roopen Arya

APPTG meeting 1/12/16

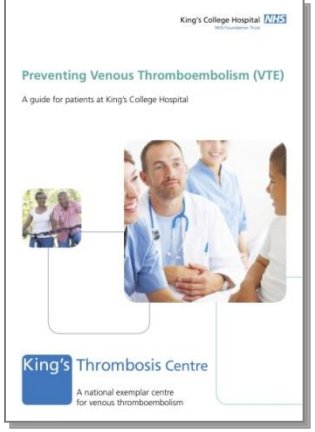
The Journey

Adaptive strategy and consistent pressure ensures VTE prevention is made a clinical priority

Global Leaders

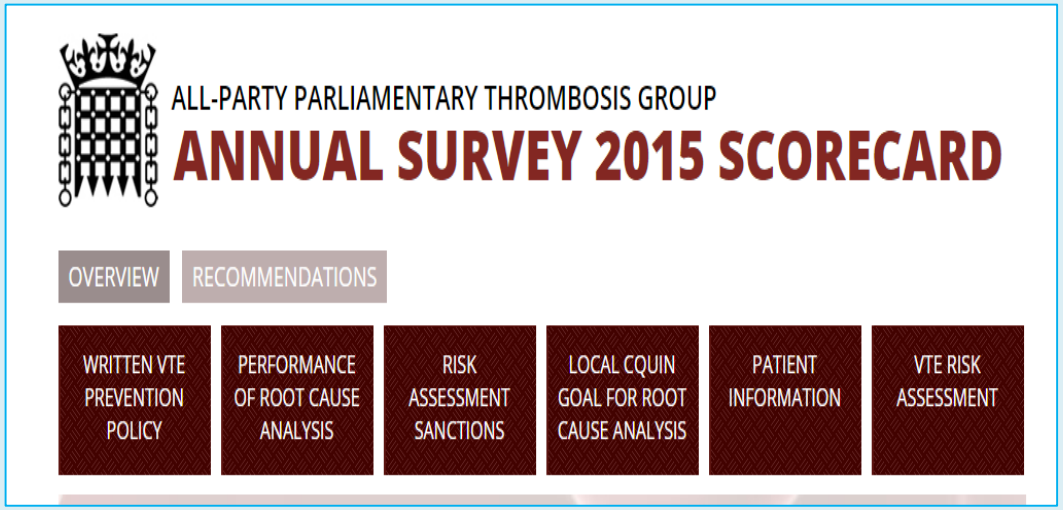
- Comprehensive, systematic approach to VTE prevention
- First national initiative of its kind anywhere in the world
- Key patient safety initiative:
  - ✓ Delivering high quality care
  - ✓ Reducing avoidable harm
  - ✓ Safer hospitals
- Leadership from NHS, parliamentarians, charities….
- Striving for excellence – VTE Exemplar Centres Network
- Delivered change, enabled by levers provided by NHS

Preventing VTE:



- Link Nurse/ Midwives
- Thrombosis team
- Patient information
- Staff education
- **VTE Prevention**
- Electronic VTEp systems
- Supportive managers
- Audit programme
- RCA of HAT cases

Patient empowerment



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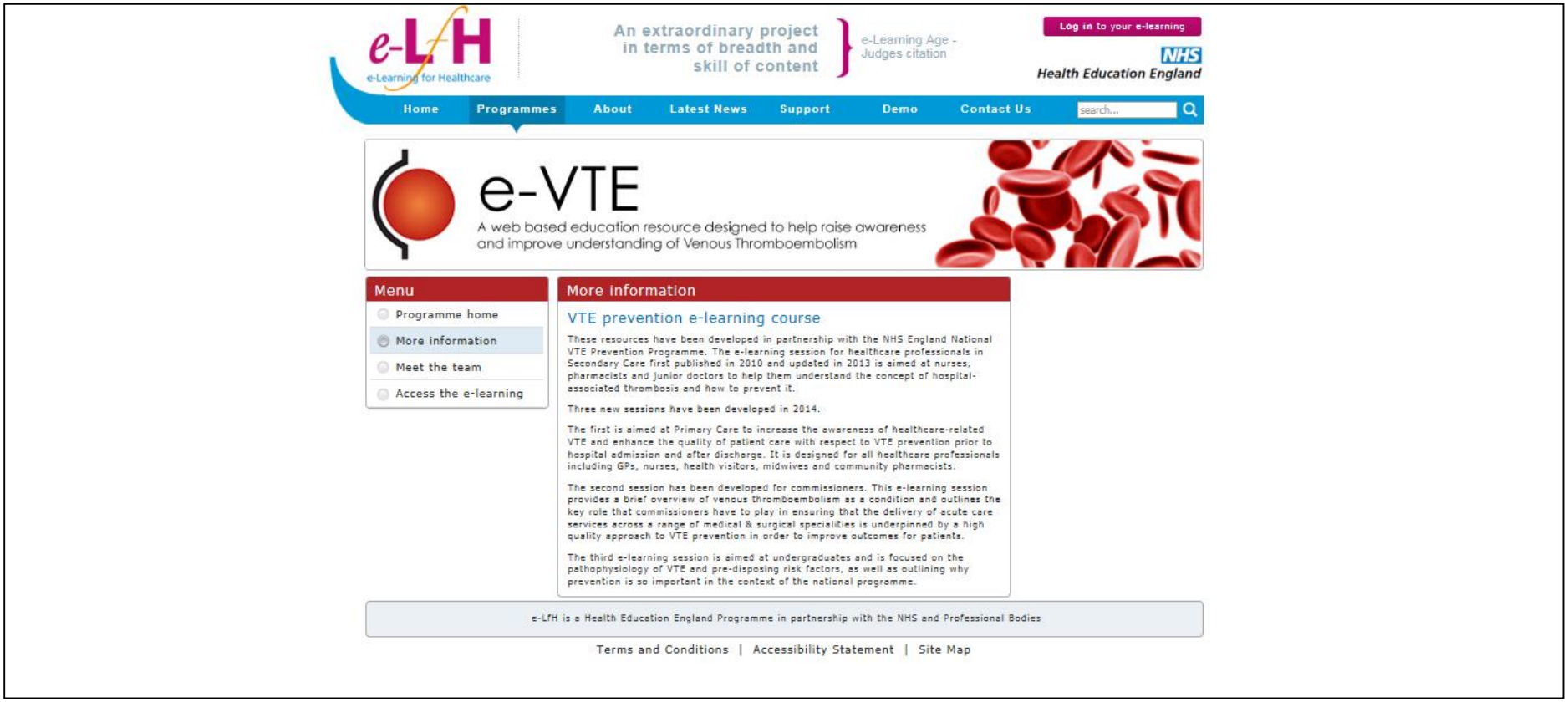
NHS England

Ongoing Education



King's Thrombosis Centre

NHS England

NHS Champions for VTE Prevention

VTE Exemplar Centres
Providing leadership in thrombosis care

King's Thrombosis Centre

NHS England

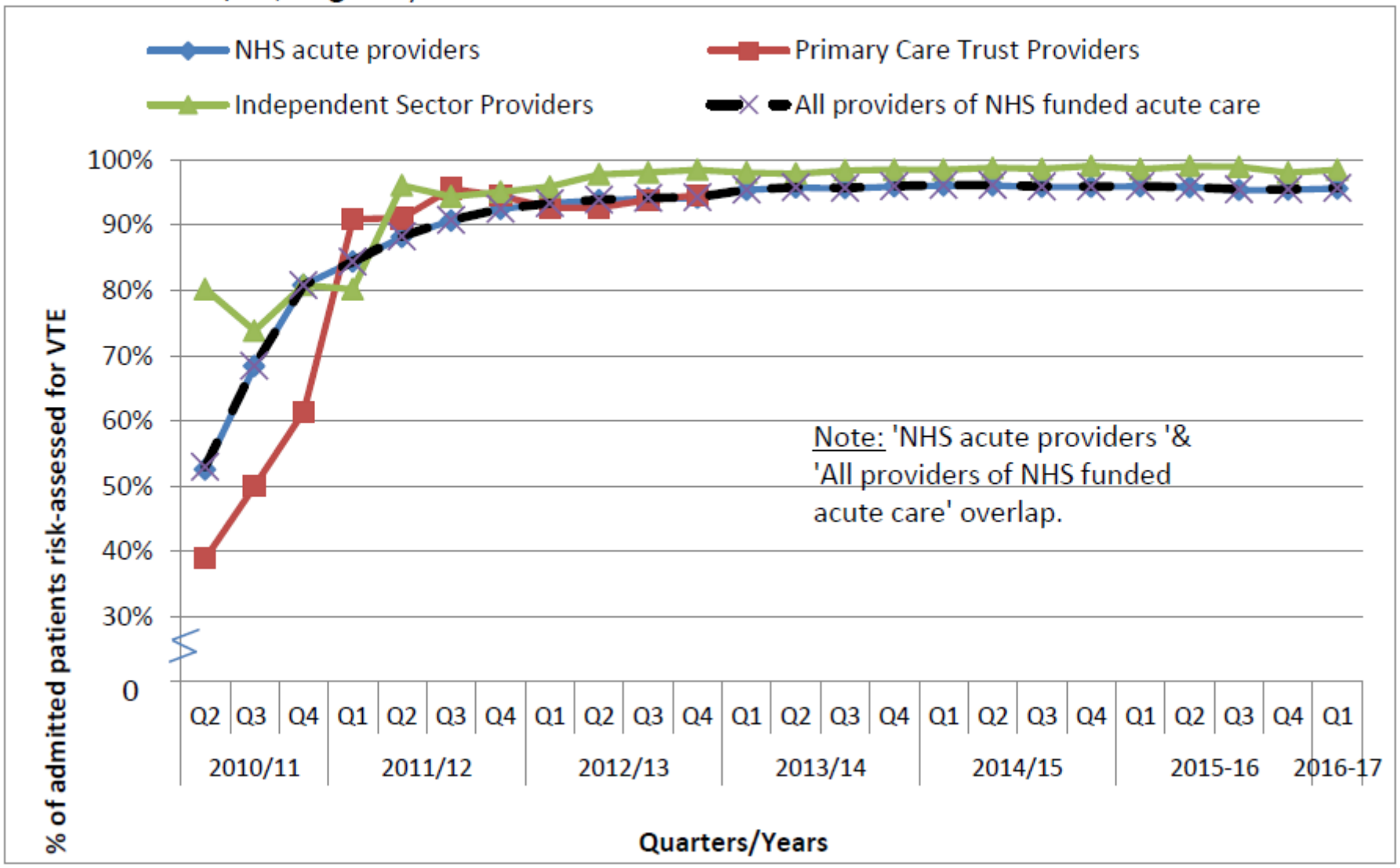
The VTE Exemplar Centres Network

VTE Exemplar Centres
Providing leadership in thrombosis care

VTE prevention: 2016

- VTE prevention should be 'business as usual'
- All system requirements are included in the NHS standard acute care contract
- National VTE Exemplar Centres Network will continue to provide leadership and support the national programme
- Continue to refine understanding of VTE outcomes
- Feasibility of national audit VTE prevention being examined

Figure 1: Proportion of adult hospital admissions risk assessed for VTE, (Quarter 2 2010/11 to Quarter 1 2016/17, England)



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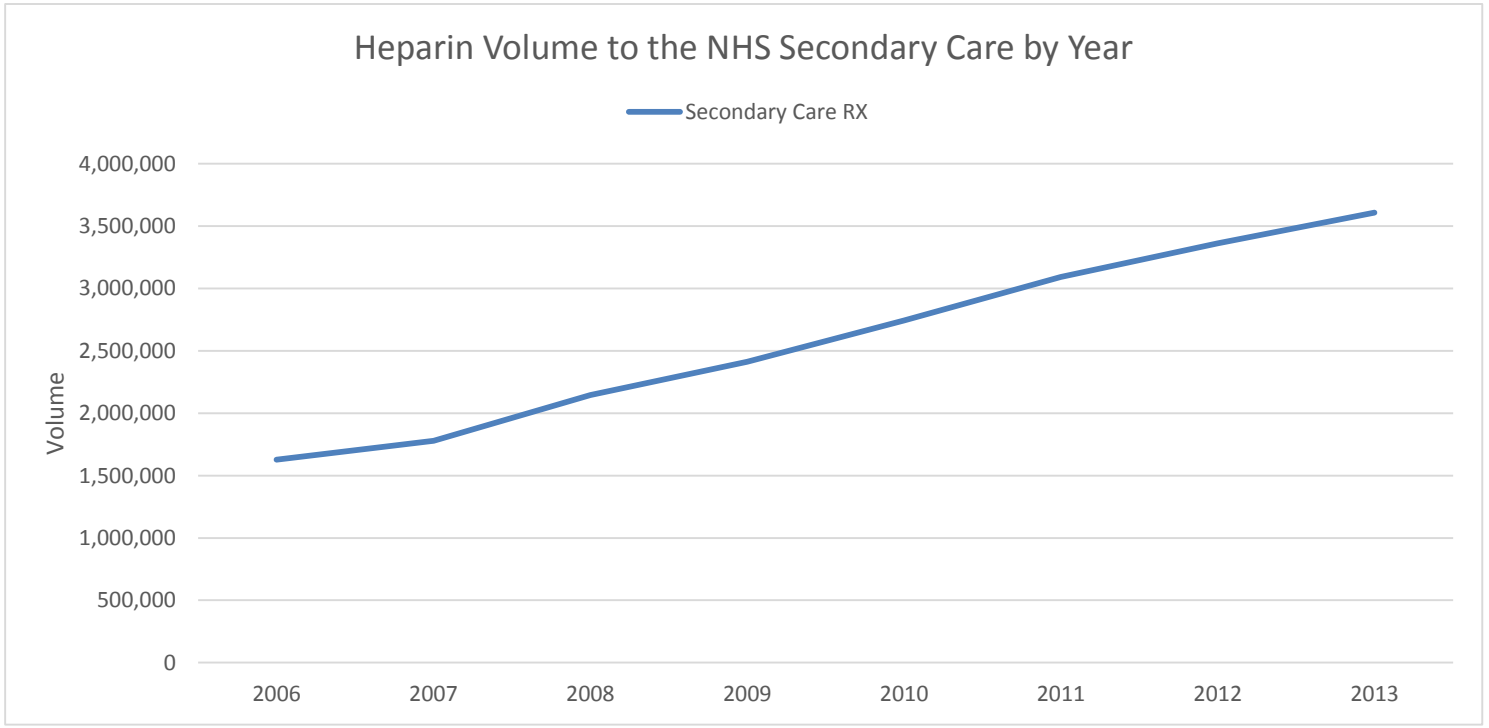
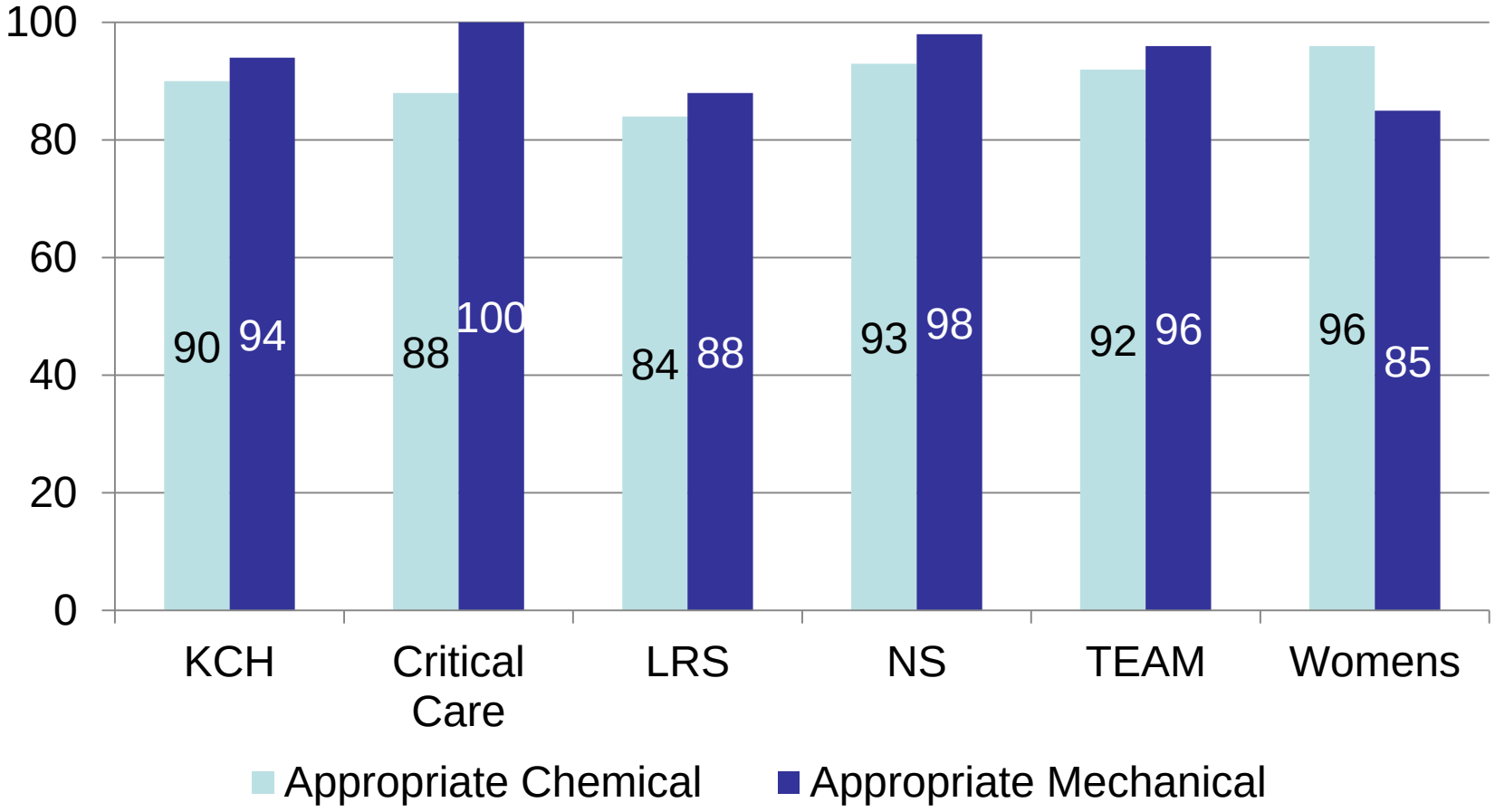
Usage of prophylactic LMWH



VTE Exemplar Centres
Providing leadership in thrombosis care

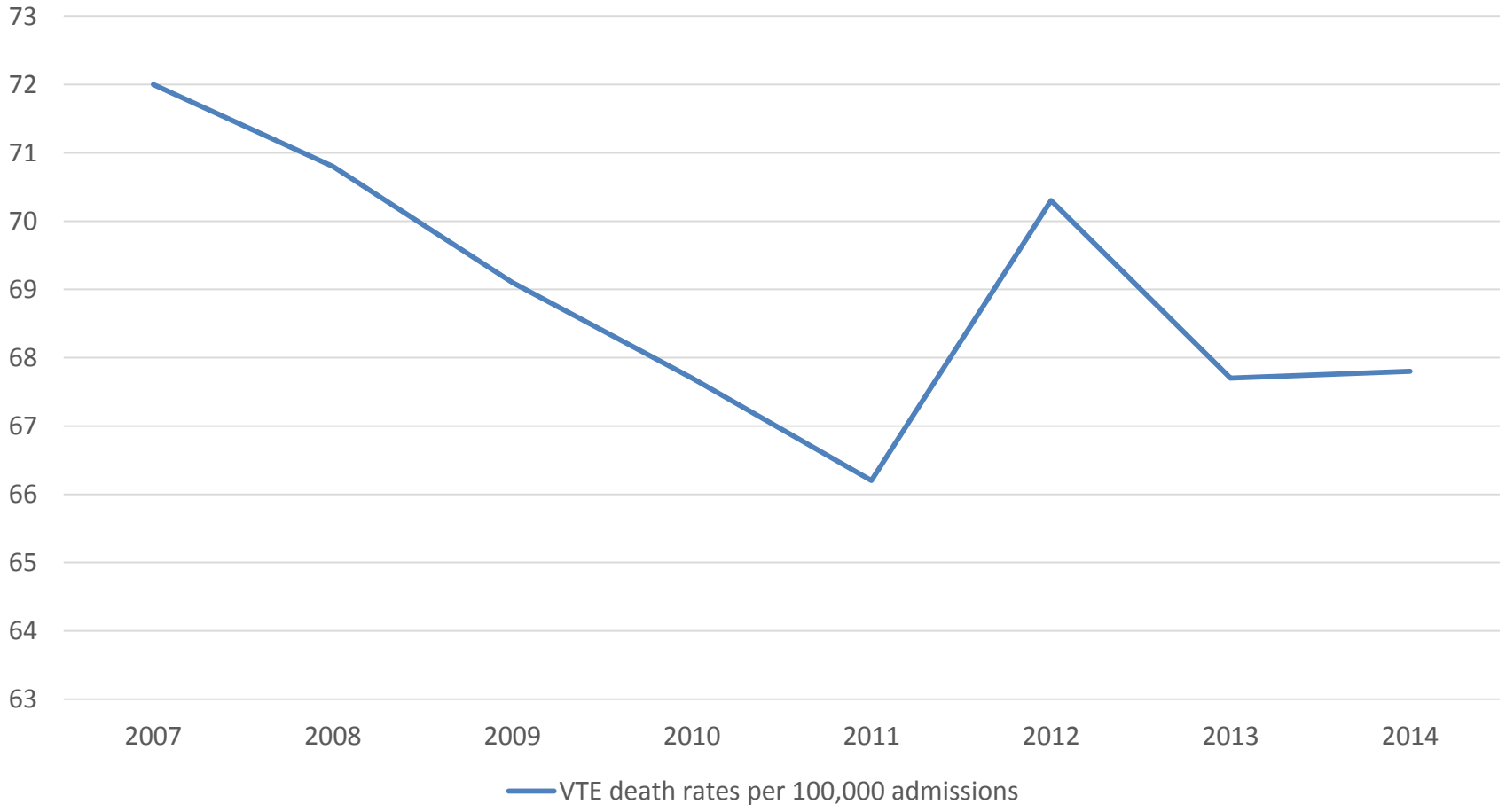
Audit findings: Standard 4

Was pharmacological or mechanical TP correct?



Deaths from VTE related events within 90 days post discharge from hospital (NHS Outcomes Framework Indicator 5.1)

Rate per 100,000 adult admissions, 2007/08 to 2013/14.



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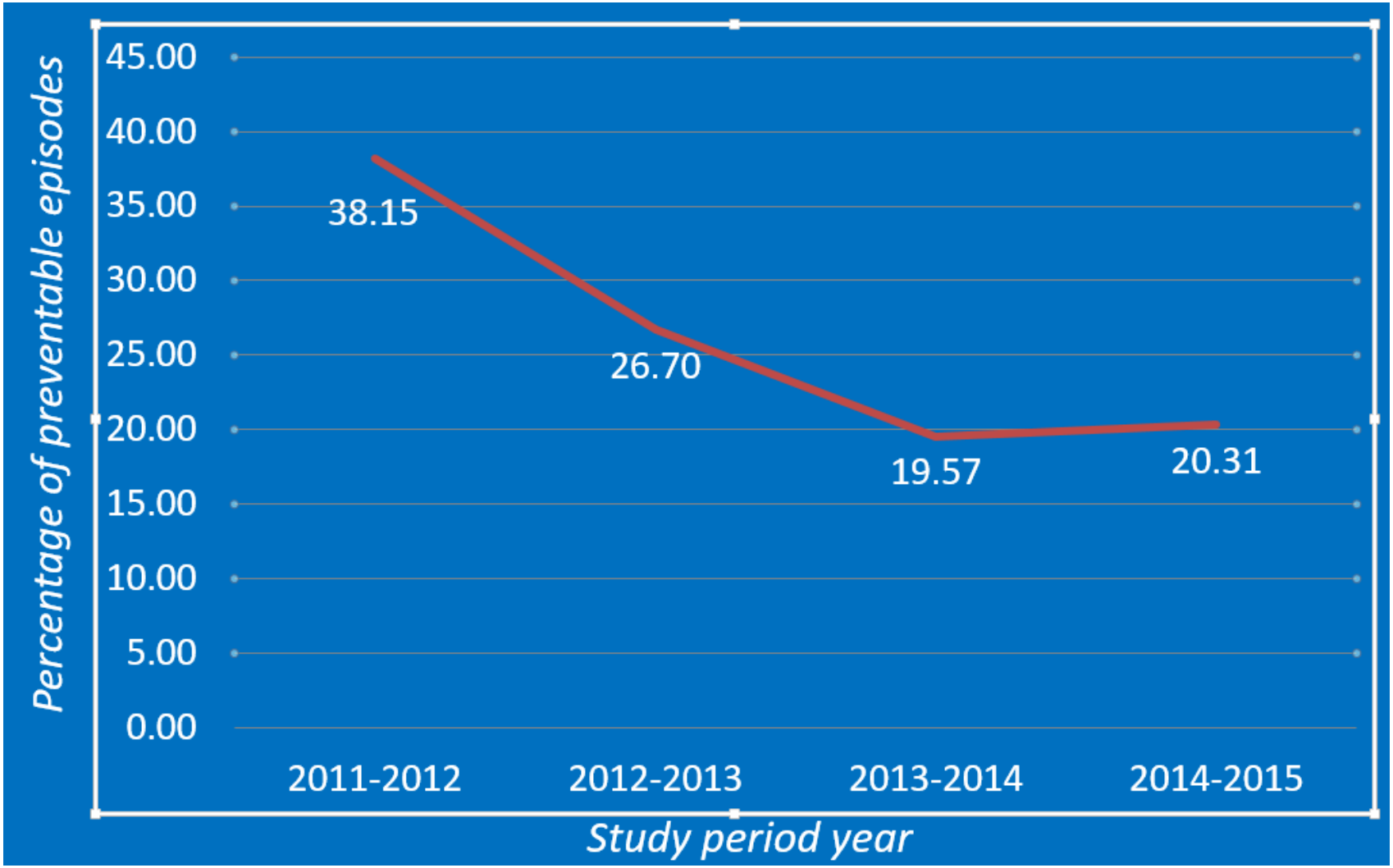
Local HAT trends



VTE Exemplar Centres
Providing leadership in thrombosis care

King's Thrombosis Centre

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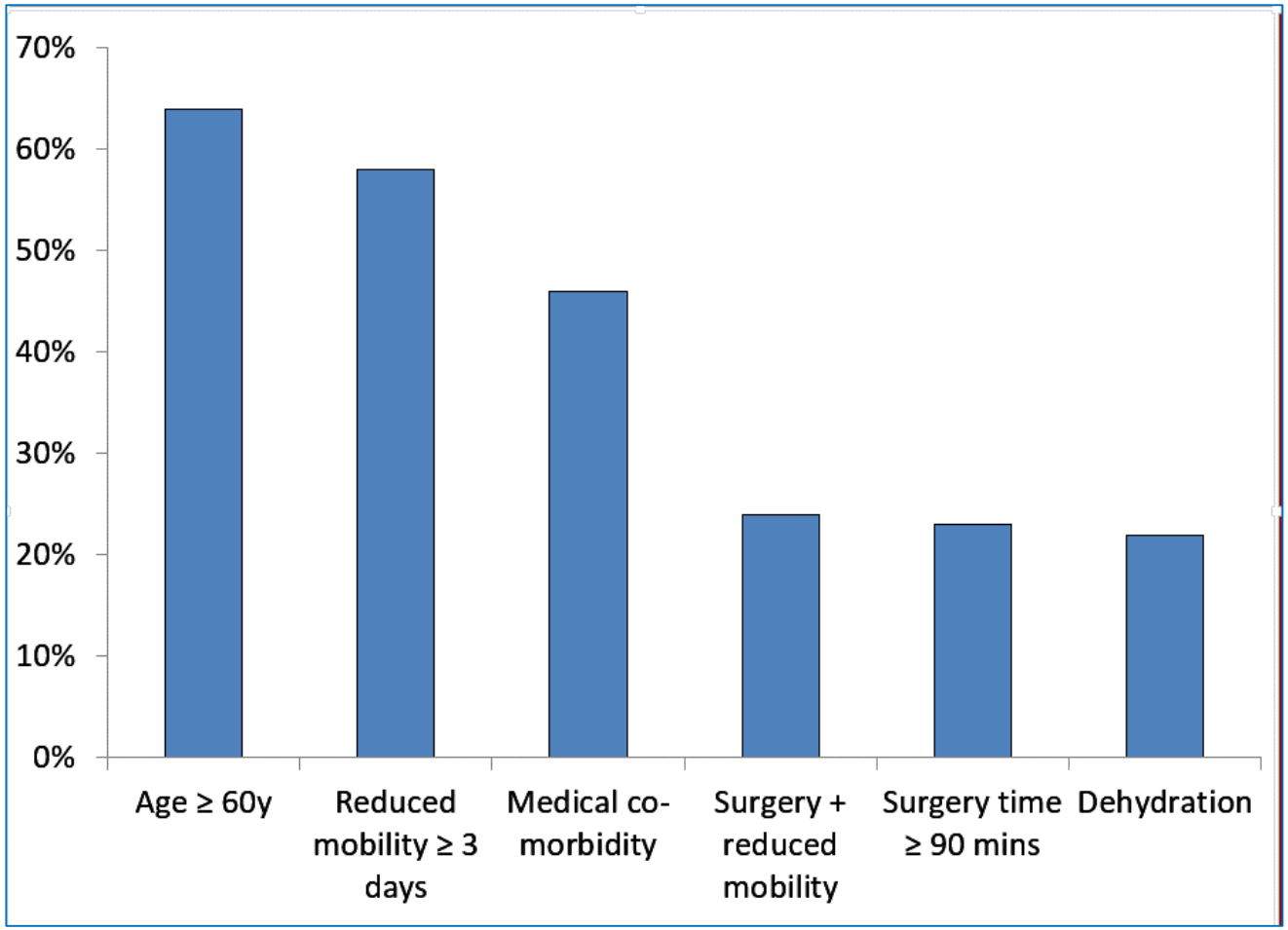
HAT root cause analysis:
thromboprophylaxis failure



VTE Exemplar Centres
Providing leadership in thrombosis care

Where next?

- Improve holistic care
- Advance beyond limitations of current prophylaxis regimens
- Improve understanding of risk
  - Lower limb immobilisation
  - Mental healthcare settings
  - Nursing homes

Thromboprophylaxis in lower limb immobilisation

- Remains a controversial subject
- Lower-limb immobilisation confers an increased risk of VTE but the absolute risk remains low
- No evidence to allow us to identify a subgroup at highest risk to target for thromboprophylaxis

Thromboprophylaxis in lower-limb immobilisation

- NICE Guidance
  - "*Consider* offering pharmacological VTE prophylaxis to patients with lower limb plaster casts after evaluating the risks and benefits based on clinical discussion with the patient
  - Offer LMWH (or UFH for patients with renal failure) until lower limb plaster cast removal" (CG92 2010)

- Local guidance re "High risk patients":

  previous VTE, cancer, pregnancy,

  Achilles tendon repair

VTE in the mental health setting

- **Evidence for increased risk of VTE?**

  Epidemiology – mental health

  Antipsychotics (rf MHRA report 2009)

- **Are we able to identify those at risk of VTE?**

  Risk factors √

  Risk assessment models X

  Proportion of patients at risk X

VTE in the mental health setting

- What thromboprophylaxis should we use?

  Evidence for efficacy X

  Evidence for safety X

- Do we have national or international guidelines to help us?

  ACCP X

  NICE X

VTE in nursing homes

- Epidemiology:
  - Autopsy study of 234 nursing home residents found undiagnosed PE to be cause of death in 8% (Gross *et al*, 1988)
  - Retrospective study of 18,661 nursing home patients in Kansas found VTE incidence 1.3/100 person years (Gomes *et al*, 2003)
  - 1 in 25 nursing home admissions had VTE diagnosis (Reardon *et al* 2013)
  - 39% 'high probability' suspected VTE patients not referred for imaging (Schouten *et al*, 2014)

VTE in nursing homes

- Risk assessment
  - NH residents with infection, substantial mobility limitations or recent general surgery are highest risk. (Leibson *et al*, 2014)
- No RCTs
- Guidelines: ACCP (AT9)
  - 5.1 In chronically immobilised patients residing at home or at a nursing home, we suggest against the routine use of thromboprophylaxis (grade 2C)

Preventing HAT

- National VTE prevention programme has developed a comprehensive systems-based approach to VTE prevention
- There have been demonstrable improvements in process measures and VTE outcomes
- Substantial burden of HAT remains
- Sustaining and improving best practice in VTE prevention is a continuing challenge

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NHS
Bromley
Clinical Commissioning Group

Developing Services for Patients in Bromley

All-Party Parliamentary Thrombosis Group

Dr Angela Bhan

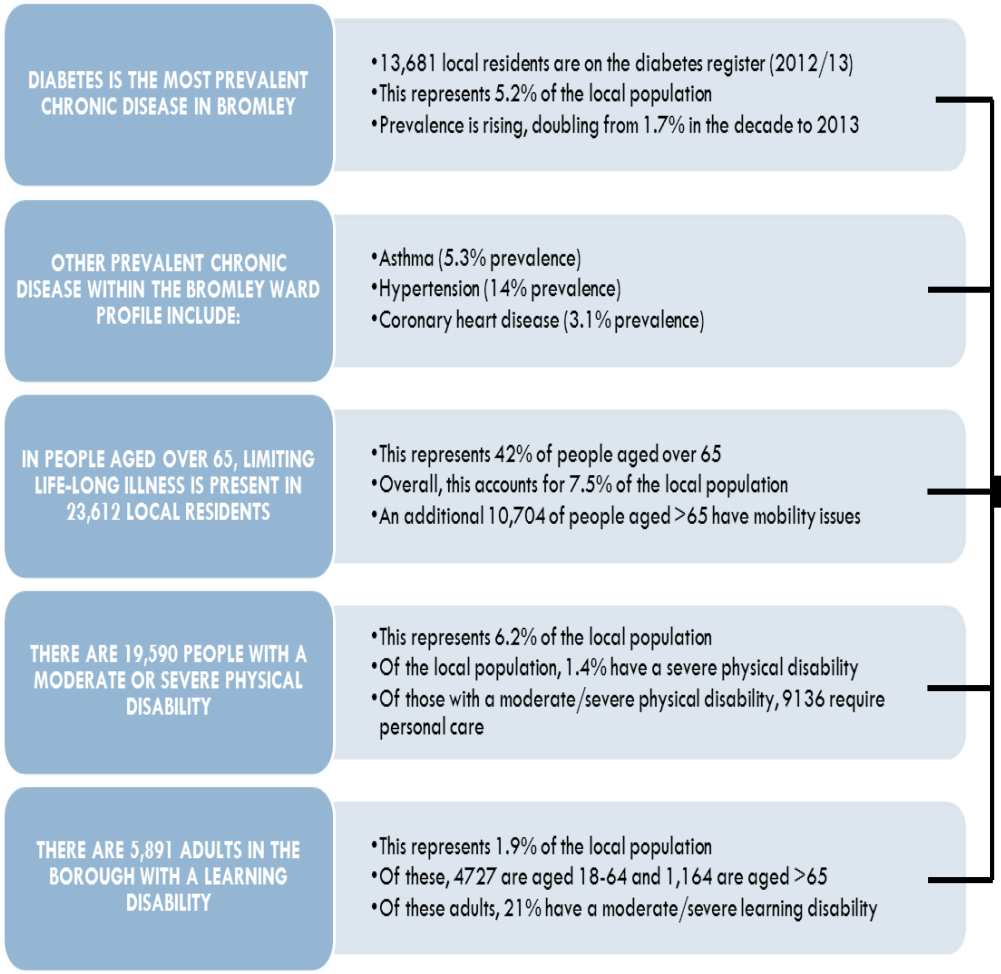
1st December 2016

Background

- Not meeting the Health and Social Care needs of the Bromley population adequately, largest population of over 85 year olds in London
- Failure to meet the 4 hour A&E target
- Increasing costs
- Fragmentation of services (and even some duplication)

Health need in Bromley

A number of factors have combined to create a cycle of adverse pressure in the Bromley health and care system. These include;



- Long term conditions are increasing, against a backdrop of a growing older population, which is creating increasing demand for the local health and social care economy.
- There is growing gap between demand and affordability which requires transformative action to resolve.
- Integrated delivery of health and social care can address this gap, but levels of out-of-hospital integration are low, with relatively little multi-disciplinary team working.
- The situation is further exacerbated by performance challenges at an acute care level, which leads to increased pressures and demand in the system as a whole.
- Both under 65 and over 65 age groups are seeing in an increase in demand and activity on the health and care system in Bromley

What are we trying to do to reduce risk of thrombosis

- Independence and mobilisation
- Avoiding protracted periods in hospital
- Ensuring patients can have good quality of care outside hospital, including adequate hydration, appropriate exercise
- Proper identification, prophylaxis and treatment

What needed to change?

1. How we manage patients with complex needs in the community

2. How we discharge patients from hospital

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Clinical Commissioning Group

Discharging patients from Hospital

The discharge pathway

‘One version of the truth’

- 15% of emergency admissions patients accounted for 70% of the emergency admission bed days
- 80% of these long stayers were over 65 years
- Once medically fit, patients took on average between 3 and 16 days to be discharged
- 17 different pathways out of the hospital for complex patients
- Long waits for continuing health care assessments
- 50% of admissions happen before 11 am whilst only 10% of discharges take place before 11

Transfer of Care Bureau

Aims

- Streamline the discharge processes across Community, Social, CHC and palliative care
- Clear MSfT definition and process
- Build effective management structure and develop strong working relations

Multi agency team on site at the PRUH under a single director:

- Hospital discharge co-ordinators, Social care staff, Community services staff, St Christopher's EoL team, CHC assessment team

Transfer of Care Bureau

Key features:

- **A multi agency approach**
- **collaborative and single structured way to help facilitate patients get out of the hospital.**
- **Single point of leadership**
- **Single dataset seen by everyone**

Transfer of Care Bureau

Evaluation at 8 months

- ~5% reduction in long stay spells
- ~8% reduction in ALOS of patients requiring supported discharges
- ~8% reduction in bed days occupied by patients post MSfT
- Mostly as a result of increased packages of care and enhanced end of life care
- Shorter time post medically fit for discharge for CHC compared to many other areas
- 'Parallel' processing of patients

BUT

- Ward staff confused about responsibilities
- Clinicians not confident discharging frail patients into the community
- Middle managers not supportive of the concept

The future of TOCB: this winter onwards

- Progression from managing the patients on current case load to predicting patients that require support
- Developing new pathways with the Emergency Department & the wards
- Providing a front door service to the hospital to address social care needs and help avoid admissions
- Management of an in-reach service from the community (community matron) into the hospital to ensure patients are re-diverted to a more appropriate place of care or tracking those patients that do require admission
- Community matron (from community services) on internal ward rounds
- GP in the hospital daily and liaising with Hospital clinicians, supporting development of a plan between hospital and community
- Day and night sitting service from purchased from third sector
- Discharge to assess approach

NHS
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Clinical Commissioning Group

Better Management of Complex Patients in the Community

Developing Integrated Care Networks

Working Together to Improve Health & Care -Key Partners

PROVIDERS

- Community – Bromley Healthcare
- Kings College Hospital
- Oxleas
- Voluntary Sector
- GP Alliance & LMC

LOCAL AUTHORITY

- Joint Out of Hospital Strategy
- Joint Commissioning
- Better Care Fund
- Health & Wellbeing Board / Joint H&WB Strategy

Neighbouring CCGs / NHSE

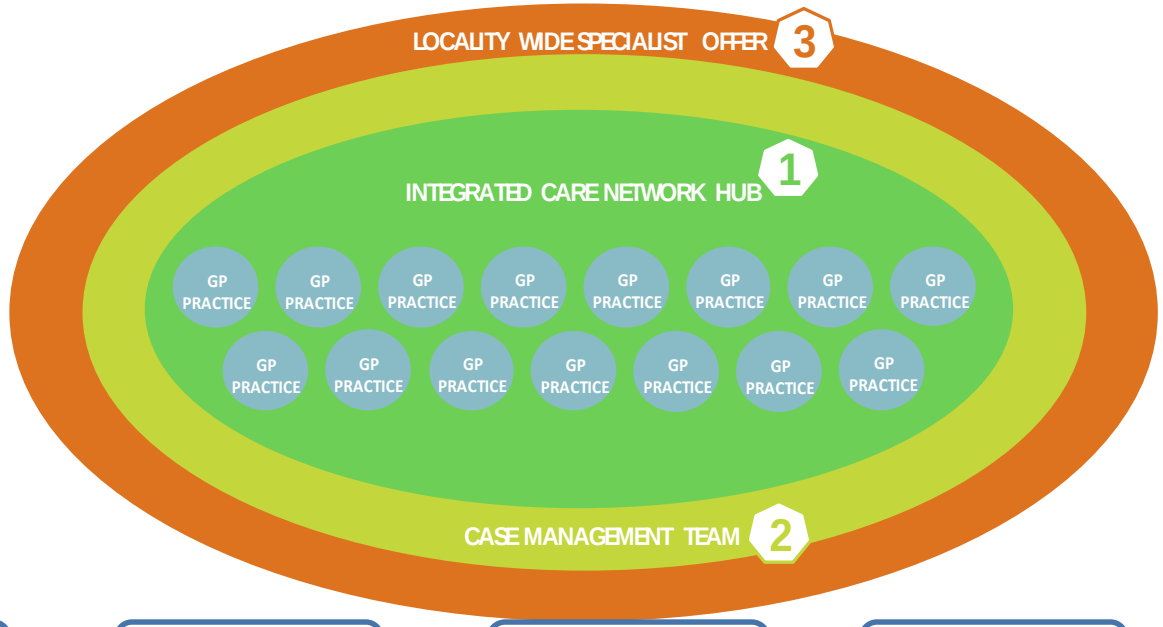
- Sustainability & Transformation Plan – joint plan to deliver the 5 Year Forward View. Builds on the Our Healthier SE London strategy.

LOCAL COMMUNITY

- Healthwatch
- Patient Advisory Group
- Voluntary Groups

INTEGRATED CARE NETWORKS :ICNs

Developing integrated care networks for pro-active, co-ordinated care



- Consistent outcomes
- Consistent functions of care
- Commitment to resource
- Aligned incentives
- Shared values

THREE GEOGRAPHICALLY ALIGNED NETWORKS BASED AROUND GP LISTS

INVOLVING STAKEHOLDERS IN DESIGN & DELIVERY

Significant engagement has taken place with a wide range of stakeholders in order to identify issues, address concerns, co-design and test the model

Involvement of GP Members

- Numerous meetings to discuss and shape the outcomes and how it might work eg
- Better identification and management of patients with AF
- Reduced lengths of hospital stay
- Improve independence

Involvement of GPs as providers

- Use of GP federation to help develop the model
- Change of contract – PMS to support different way of working
- Pilot using local incentive scheme
- Independent GP chairing multi-disciplinary team

Involvement with other partners

- Community services providing co-ordination and community matrons
- Hospital – interface geriatricians, new frailty unit
- Age UK providing care navigators and social prescribing scheme

Additional work completed prior to mobilising ICNs October 2016

- Clinical round tables
- Support for Providers to work together to develop proposals for two programmes including ICN model (e.g. risk strat and integrated case management)
- new frailty pathway and unit
- All providers and third sector signed a memorandum of understanding

WHAT ARE THE BENEFITS?

- Sustainable system
- Easier for both professionals and people to use
- Creates a proactive culture of care for the population and health and social care providers. Supports prevention and proper plans, for example to reduce risk of VTE.
- Centred around GP lists, as GPs practices hold the patient lists
- Contain components of the secondary offer as well as other out of hospital providers.
- Will be geographically aligned to populations / services.
- Will provide better links between primary and secondary care, i.e. geriatricians linked to GP practices in that community, and linking up with care homes.
- Social prescribing scheme to link patients to wider community services and support

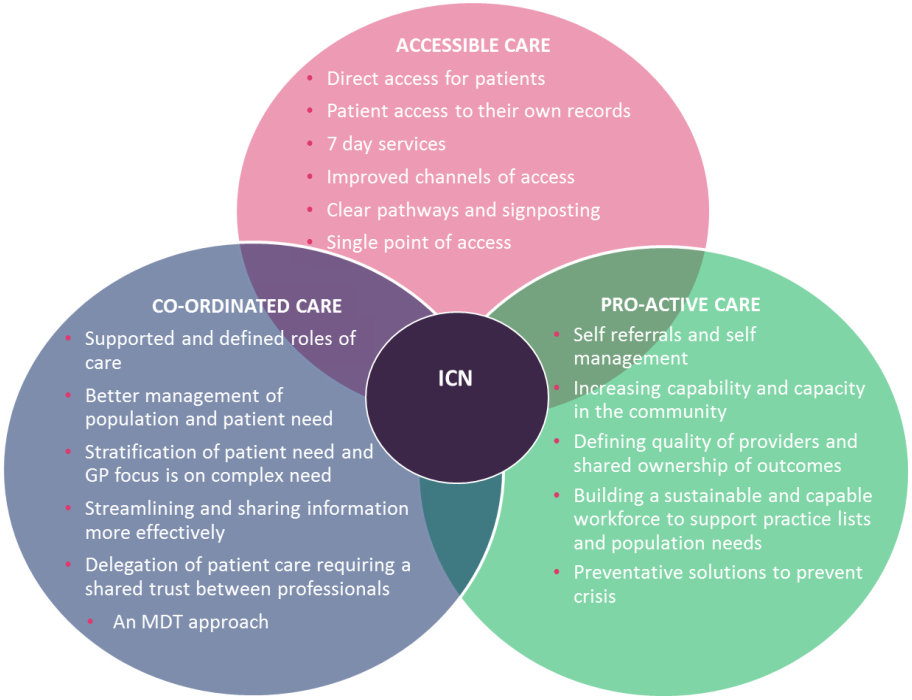
HOW IS IT DIFFERENT?

- **BENEFIT FROM ECONOMIES OF SCALE**: ICNs could employ consultants, bring in senior nurses, consultant physicians, **geriatricians**, paediatricians and psychiatrists to work alongside community nurses, therapists, **pharmacists**, psychologists, social workers, and other staff.
- **MOVE THE PROVISION OF CARE INTO AN OUT OF HOSPITAL SETTING**: Over time, shift majority of outpatient consultations and most ambulatory care to out of hospital settings.
- **TAKE ON DELEGATED RESPONSIBILITY FOR MANAGING THE BUDGET FOR REGISTERED PATIENTS**. Where funding is pooled with local authorities, a combined health and social care budget could be delegated to ICNs.
- **UTILISE RESOURCES TO CHANGE BEHAVIOURS:** The ICNs would also draw on of carers, volunteers and patients themselves, accessing hard-to-reach groups and taking new approaches to changing health behaviours.

WHAT PART DOES THE THIRD SECTOR PLAY?

Establishment of Bromley Third Sector Enterprise (BTSE) providers - clear commitment through formation of consortium / formal partnership of major local voluntary sector providers to deliver the strategy, which will provide the following additional benefits to the delivery of the ICNs:

- **Having a single contract** for all the voluntary sector activity commissioned as part of the new ICN model. Lead for care navigators.
- **Representative from the BTSE** on the appropriate Board ICNs, taking shared responsibility for delivery of collective outcomes on behalf of the BTSE.
- **Quality and value for money benefits** from having the voluntary sector making a direct contribution to a whole system model of healthcare.
- **Encompassing the 'patient voice**' and helping people connect about health and wellbeing issues that are important to them, their family and their community.
- **True integration with all major providers** from the voluntary sector (social prescribing), and with statutory providers.



PATIENT IDENTIFICATION

1

All **HEALTH AND CARE PROFESSIONALS** will case find and identify High Risk, High system users and provide their details to the **MDT LIAISON COORDINATOR** (via the Bromley Healthcare Single point of entry). *N.B. In Year 1 only GPs will be actively case finding*

The **MDT LIAISON COORDINATOR / CARE NAVIGATOR** provide **CARE NAVIGATION** and **CARE COORDINATION** support at an ICN level

PATIENT IDENTIFICATION AND CASE FINDING

2

The **MDT LIAISON COORDINATOR** support GPs in updating EMIS for any additional patient information, and where required a **NOMINATED GP CHAIR** will apply clinical judgement to non-GP identified cases to ensure consistency of assessment *(from Year 2 onwards)*;

If system capacity becomes an issue the **NOMINATED GP CHAIR** will prioritise who has the highest clinical and social priority for **INTEGRATED CASE MANAGEMENT**

CLINICAL GOVERNANCE AND DEMAND MANAGEMENT

3

Based on individual organisation consent policies, by this point the relevant **HEALTH AND CARE PROFESSIONAL** or the **MDT LIAISON / CARE NAVIGATOR** will have checked that the **PERSON** is happy to be put on the **PROACTIVE CARE PATHWAY**

PATIENTS IDENTIFIED AS REQUIRING PROACTIVE CARE PATHWAY will be placed on pathway for initial holistic assessment via a Community Matron, with the referral being managed by the **MDT LIAISON COORDINATOR**

PATIENT CONSENT

To ensure an intervention is most effective, resources must target the individuals at highest risk, and any case-finding method needs to be able to identify individuals at high risk of future emergency admission to hospital.

In practice, most programmes use a combination of a predictive case finding model and clinical judgement; the model is used to flag individuals who are at high risk, and the clinician then makes a judgement as to whether a person is likely to benefit from case management.

PROACTIVE CARE PATHWAY

4

An initial **HOLISTIC ASSESSMENT** (Guided conversation) is carried out with the patient by the most relevant person, who will usually be the Community Matron

INITIAL ASSESSMENT

5

An **INTEGRATED CARE AND SUPPORT PLAN** will be developed by the Community Matron with the patient, supported by the **CARE NAVIGATOR** role (when required)

INTEGRATED CARE PLAN

6

A **MULTI-DISCIPLINARY TEAM** carries out an initial review of the person, updates and ratifies the **INTEGRATED CARE PLAN**, and assigns a **CLINICAL LEAD** based on the agreed **PRIMARY NEED** of each person

INITIAL MDT MEETING

7

The **NOMINATED GP CHAIR** will Chair the MDT meetings to ensure all the patient's needs are considered and actioned, ensuring that the best interests of the patient are considered and prioritised

CLINICAL GOVERNANCE

8

The **CLINICAL LEAD** is the first point of contact for the patient for their **PRIMARY NEED**, supported by the **MDT LIAISON COORDINATOR** who will be the main point of contact for all other needs (including self-management support)

POINT OF CONTACT

9

The updated **INTEGRATED CARE AND SUPPORT PLAN** is shared with the patient by the most relevant person and the care plan is implemented, overseen by the **CLINICAL LEAD** and coordinated by the **CARE NAVIGATOR** with support from the **MDT LIAISON COORDINATOR**

PATIENT INVOLVEMENT

10

The **MDT LIAISON / CARE NAVIGATOR** arrange **MDT** reviews at the intervals set out in the **INTEGRATED CARE AND SUPPORT PLAN** to review the care plan progress and make changes to the patient's care as required (70% of patients will require discussion at a 2nd MDT)

REGULAR REVIEW

11

When required an **HOLISTIC ASSESSMENT** (guided conversation) is carried out to re-assess the needs of the person, and where appropriate reduce the intensity of support they need

RE-ASSESSMENT

HOW THE MDT MEETING WORKS

The **Community Matrons** will have done a comprehensive assessment including the patient's wishes/goals and will present this alongside your presentation of the patient

The **MDT Liaison Coordinator** will ensure relevant organisations, who should be helpful in formulating an action plan for this patient, will attend the MDT meeting

The role of the **GP Chair** is to ensure that the nature of the discussion and care plan are of good quality.

The **Care Navigators** are the point of contact into the voluntary sector e.g. Age UK/ MIND etc. and should therefore pick up these actions.

Mental health team and **Geriatricians** will be available depending on need and can pick up relevant actions.

If information is needed from **other community services** e.g. SALT/ podiatry you should expect that your Community Matron and MDT Liaison Coordinator will have accessed this information.

In the long run we will have a local care record available to help exchange information (we are looking into whether a multi-organisational care plan is feasible)

INTEGRATED CASE MANAGEMENT

HOLISTIC NEEDS ASSESSMENT

- Once an individual has been selected as being eligible for the proactive care pathway and they have confirmed they are happy for this then they will have a holistic needs assessment carried out by a Community Matron.
- The holistic needs assessment will identify the individual needs of the person (clinical, psychological, social, economic, practical, physical, spiritual). including the patient's abilities, strengths and preferences.
- The Community Matron will focus on the needs identified and prioritise them (with input from the individual).
- The assessment acts as part of the care planning process in the context of a collaborative working relationship between the patient and the health and care professionals supporting them.

INTEGRATED CARE AND SUPPORT PLAN

- Using the outputs of the Holistic Needs Assessment, the Community Matron (supported by the MDT Liaison) will develop an Integrated Care and Support Plan for the individual.
- This plan will be discussed and updated at the MDT meetings, with input from all relevant health and care professionals.
- The person will receive a copy of their Integrated Care and Support Plan.

MULTI-DISCIPLINARY TEAM WORKING

MULTI-DISCIPLINARY TEAM MEETINGS

- The MDT will be attended by representatives from each relevant health and care group, but as a minimum will include a GP, Community Matron, MDT Liaison, Social Worker, and a voluntary sector representations
- The purpose of the MDT meetings are to review the care of each individual, and to update the integrated care and support plan.
- When the MDT first assesses an individual they will collectively agree the primary care need of the individual, and assigns a named clinical lead to manage that primary need.
- The MDT will meet at regular intervals (either physically or virtually) to assess the care needs of the individual and amend their care plan as necessary.
- The MDT team will collectively agree when an individual's health and care needs have improved to a point where their needs can be reviewed on a less regular basis.

COMMUNITY COORDINATION TEAM

- The Community Coordination Team will support the GPs in using the Risk Stratification tool to confirm the risk status of the people identified as being high risk and / or high system users.
- The Community Coordination Team will be responsible for setting up the MDT meetings and ensuring that the care of each individual on the proactive care pathway is coordinated.
- The MDT Liaison will support the Community Matron in developing and updating the Integrated Care and Support Plans.
- The MDT Liaison will be the individual's named main point of contact for all needs outside of their primary need (The named Clinical Lead will be the named first point of contact for the patient for their primary need).

NEW SUPPORTING ROLES

MDT LIAISON

- Carries out an initial clinical assessment (guided discussion) with the patient and directs them to the appropriate health and / or care service.
- Coordinates patients appointments to ensure they are combined where possible.
- Sets up MDT meetings where required.
- Acts as the main liaison between GP and MDTs in setting up intra-professional referrals.
- Supports GPs / MDTs to ensure appropriate personalised care plans with coordinated packages of care are in place.
- Provides clinical support to the integrated case management team.
- Supports early discharge planning and medicine management.

CARE NAVIGATOR

- Holds and updates an (online) directory of all health and care services in Bromley (including voluntary services).
- Helps patients and professionals navigate the health and care system in Bromley by signposting them to the most appropriate person.
- Books appointments for patients (either directly or following a referral from a health and care professional).
- Actively supports self-management including signposting to voluntary and community organisations.
- Provides signposting to local relevant education programmes.
- Increases the awareness of appropriate resources within the local community and makes the information more accessible to people.

FEEDBACK FROM INITIAL MDTs

"We achieved more for each of these patients in a 20 minute discussion than we would have done just spending 20 minutes alone with the patients"

"Had the practice not been looking for these patients for the ICN then we had no intention of doing anything particular over and above their management plan to date. Each patient now has multiple actions ongoing which without doubt will improve their conditions"

"It was crystal clear that everyone was very keen to help and to support those patients discussed, and it was nice to be able to contribute to this"

"It was helpful for actions to be taken away from the MDT without the need for formal referral"

"... the Community Matrons assessments were excellent and vital to ensuring an accurate action plan"

"... it was an incredibly worthwhile session and moving forwards we will really be able to transform some patient's lives"

The Future:

Frailty Unit and pathway – opening January 2017

Reactive care pathway – later in 2017

Planned care pathways – continuing over the next 3 years

NHS
Bromley
Clinical Commissioning Group

Any Questions?

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APPTG Annual Conference 2016

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Incidence of venous thromboembolism in care home residents

Apenteng PN, Fitzmaurice DA

Patricia Apenteng
University of Birmingham

UNIVERSITY OF OXFORD

UNIVERSITY OF BIRMINGHAM

Disclosure

I have no relevant financial or nonfinancial relationships to disclose

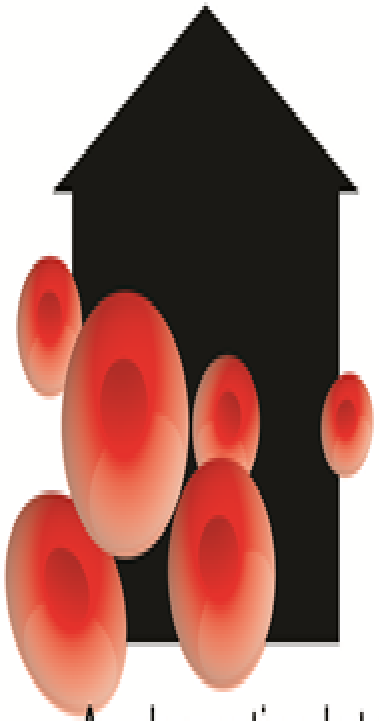
Background

- US data suggest 8 fold risk of VTE associated with residence in a long-term care facility[1]
- Important VTE risk factors are common in care home residents[2,3] (HAT)

  Immobility, advancing age, malignancy, previous VTE, obesity, comorbidities such as heart failure, stroke, COPD, diabetes
- Epidemiology of VTE in care homes remains unclear
- VTE risk assessment and thromboprophylaxis in the care home setting is also unclear

[1]Gross JS et al *Arch Intern Med* 1988; [2] Pai M, Douketis JD *Cleve Clin J Med* 2010

[3]Haas S, Spyropoulos AC *Clin Appl Throm Hemost* 2008



VTEC

An observational study to determine the incidence of VTE among care home residents

Methods

- Sample of care homes* recruited in Birmingham and Oxford, stratified by type, size, ownership
- Residents aged ≥ 18 enrolled following consent / consultee declaration
- Excluded: temporary residents & residents with life expectancy < 6 months
- Participants followed up for 12 months

*Care homes with nursing and care homes without nursing

Data collection

- Case notes review of care home and GP records at baseline and 12 months

Baseline review

- Demographics, comorbidities and medications
- VTE risk factors
- VTE prevention strategies
- Mobility measured using the Rivermead Mobility Index (RMI)

Follow up review

- Deaths*
- Hospital admissions
- Primary care consultations

*Complemented with cause of death data from Health and Social Care Information Center (HSCIC)

Study endpoint

- Primary endpoint: development of VTE during 12 months study period

Endpoint definitions

1. Definite VTE – radiological evidence / treatment
2. Probable VTE – high clinical suspicion, no radiological diagnosis
3. Possible VTE – VTE cannot be ruled out, e.g. haemoptysis, pleuritic chest pain

Endpoint adjudication

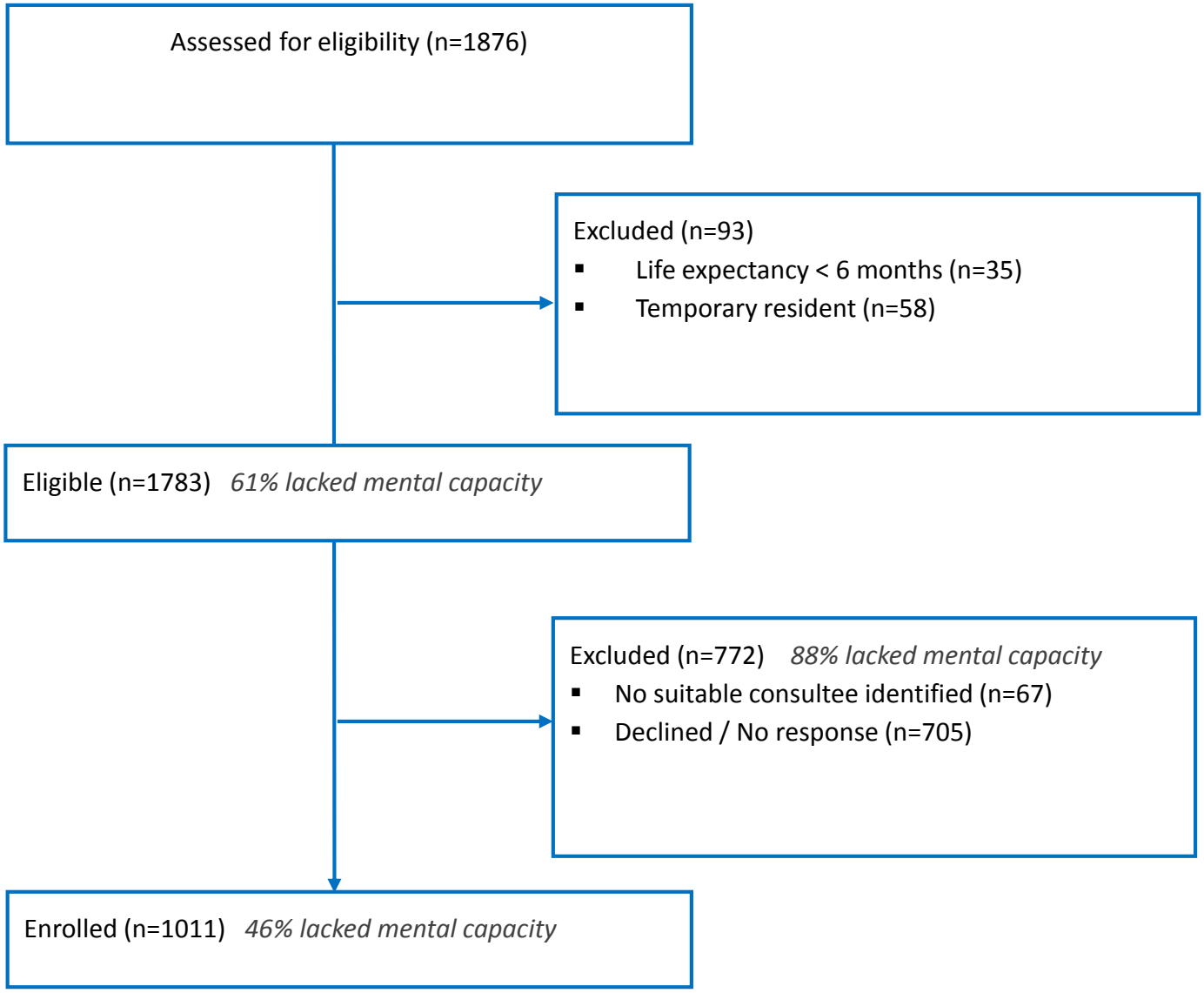
- All follow up events adjudicated by 2 internal clinical staff with VTE training, any disagreement adjudicated by PI
  - Hospital admissions
  - Deaths
  - GP consultations re VTE symptoms
- All events classed as definite, probable, possible VTE referred to independent adjudication committee


RESULTS

45 participating care homes

Care home characteristics	*All Birmingham and Oxford care homes	Study care homes
Care homes		
Number	231	45
Type		
With nursing	119 (52)	27 (60)
Without nursing	112 (48)	18 (40)
Size, no. of beds		
<30 (small)	89 (39)	15 (33)
30-49 (medium)	82 (35)	15 (33)
≥50 (large)	60 (26)	15 (33)
Mean number of beds (SD)	NA	43.96 (21.38)
Ownership		
Private / For profit	146 (63)	35 (78)
Not for profit	85 (37)	10 (22)
Location		
Birmingham	144 (62)	27 (60)
Oxford	87 (38)	18 (40)
Study participants per care home		
Mean (SD) participants per home	NA	22.47 (10.00)
Median number participants per home (IQR)	NA	20 (15-29)
Number of participants per home (range)	NA	6-45

1011 study participants



Participants' characteristics

Participants' characteristics	N=1011
Mean age (SD), years	85.1 (8.6)
Age ≥75 years	88.3
Time in care home, mean(SD) years	2.8 (8.2)
Women, %	71.4
White ethnicity, %	96.8
Dementia, %	52.7
≤ 3 Comorbidities, %	74.1
Personal history of VTE, %	9.1
BMI ≥ 30 kg/m^2 (obese), %	12.4
Bedridden (RMI=0), %	22.2
Significantly reduced mobility (RMI 1-6)	36.5
Active cancer / cancer treatment	11.4
Do not resuscitate order (DNR) in place, %	31.7

Department of Health VTE risk assessment

Risk assessment criteria	n	%
Mobility		
Significantly reduced mobility	593	58.7
Thrombosis risk (based on 593 patients with reduced mobility)		
Active cancer or cancer treatment	69	11.6
Age >60	587	99.0
Dehydration	NM	NM
Known thrombophilias	2	0.3
Obesity (BMI>30Kg/m2)	83	14.0
One or more significant medical comorbidities*	425	71.7
Personal history of VTE	60	10.1
Use of hormone replacement therapy	1	0.2
Use of oestrogen-containing contraceptive therapy	0	0.0
Varicose veins with phlebitis	2	0.3
Pregnancy or <6 weeks post-partum	0	0.0
Number with at least one thrombosis risk factor	593	100%

59% (n=598) at high risk of VTE and would be eligible for VTE prophylaxis in hospital setting

QThrombosis one year risk

- 96% with absolute risk of ≥0.3 i.e. three times the general population risk

Predictor variables

- Age
- BMI
- Smoking status
- Townsend deprivation score
- Congestive cardiac failure
- Rheumatoid arthritis
- Chronic renal disease
- Inflammatory bowel disease
- Cancer
- Recent hospital admission
- Recent hip fracture or hip surgery
- Current use of antipsychotic drugs
- Current use of tamoxifen
- Current use of HRT
- Use of antiplatelets
- Cardiovascular disease
- Atrial fibrillation
- Asthma
- COPD
- Family history of VTE

VTE prevention

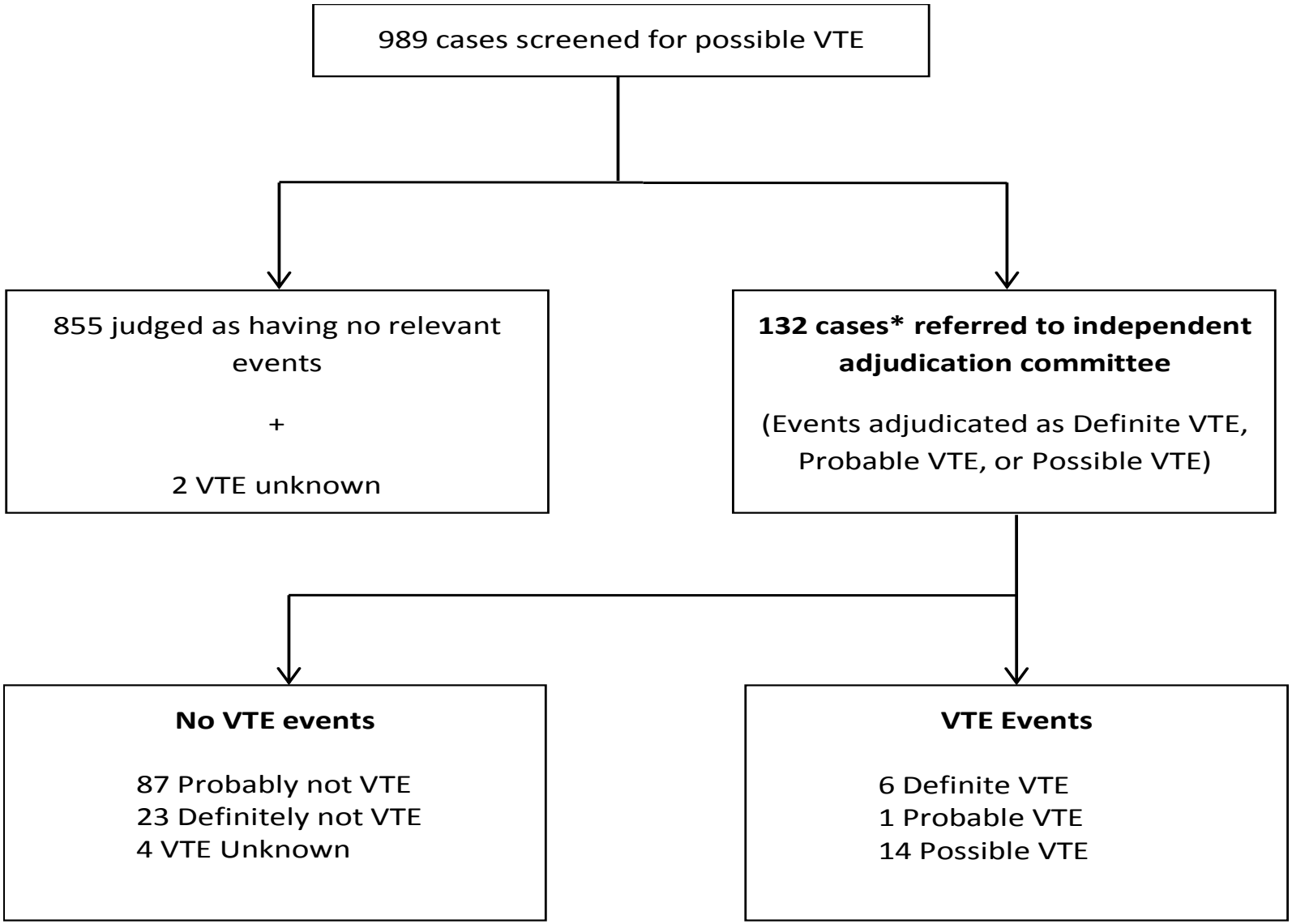
- VTE prophylaxis underused
  - 0.7% on prophylactic heparin (n = 7)
  - 5.5% (n = 56) were on oral anticoagulants
  - 5% using compression stockings (n = 51)
  - None on pneumatic foot compression device or inferior vena cava filter
- None had been risk assessed for VTE

Follow up analysis

- Follow up analysis consisted of 989 participants
  - 698/989 were followed up for 12 months
  - 45/989 moved away
  - 246/989 died
- Total follow up period: 847.5 person years
  - Median (IQR) follow up period: 365 (300- 365) days
- Follow up events
  - 574 hospital admissions (relating to 345 patients)
  - 246 Deaths
  - 171 GP consults*

* classed as query VTE by internal team

Case identification of VTE events



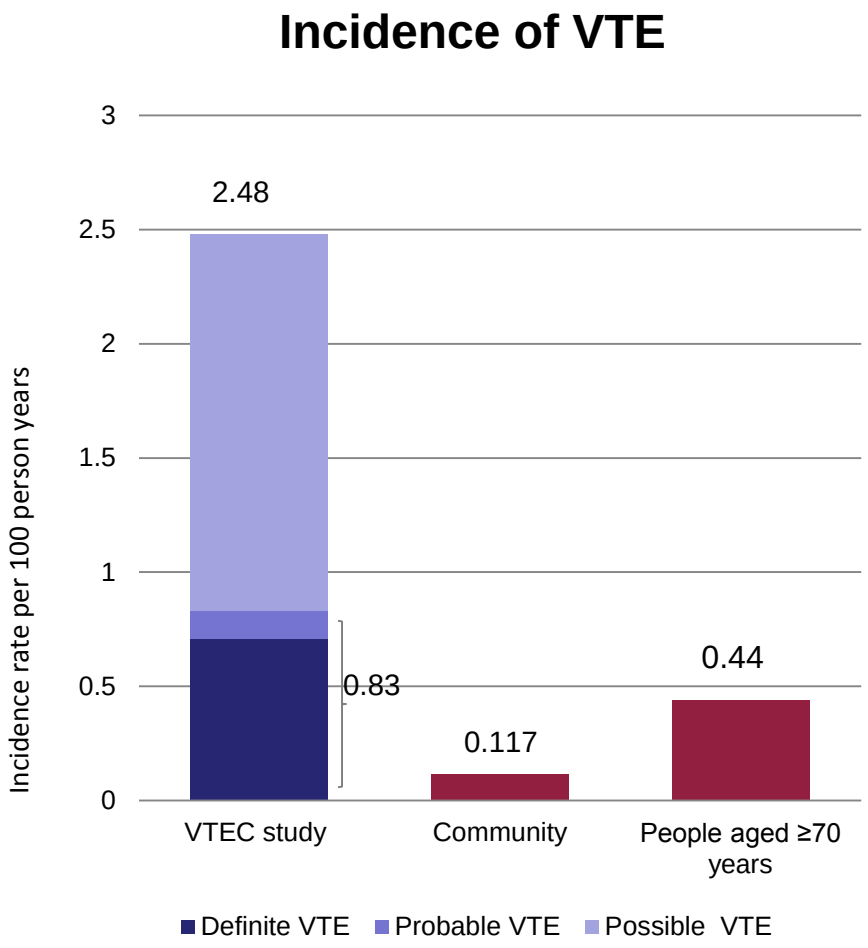
Incidence of VTE

Characteristic	No. of events	n	Person years	Incidence rate per 100 person years	95% confidence interval	
Diagnostic Criteria						
Definite VTE*	6	989	847.52	0.71	0.26	1.54
Definite and probable VTE	7	989	847.52	0.83	0.33	1.70
Definite, probable and possible VTE	21	989	847.52	2.48	1.53	3.79

* Comprised of 5 DVTs and 1 PE

How do we interpret these data

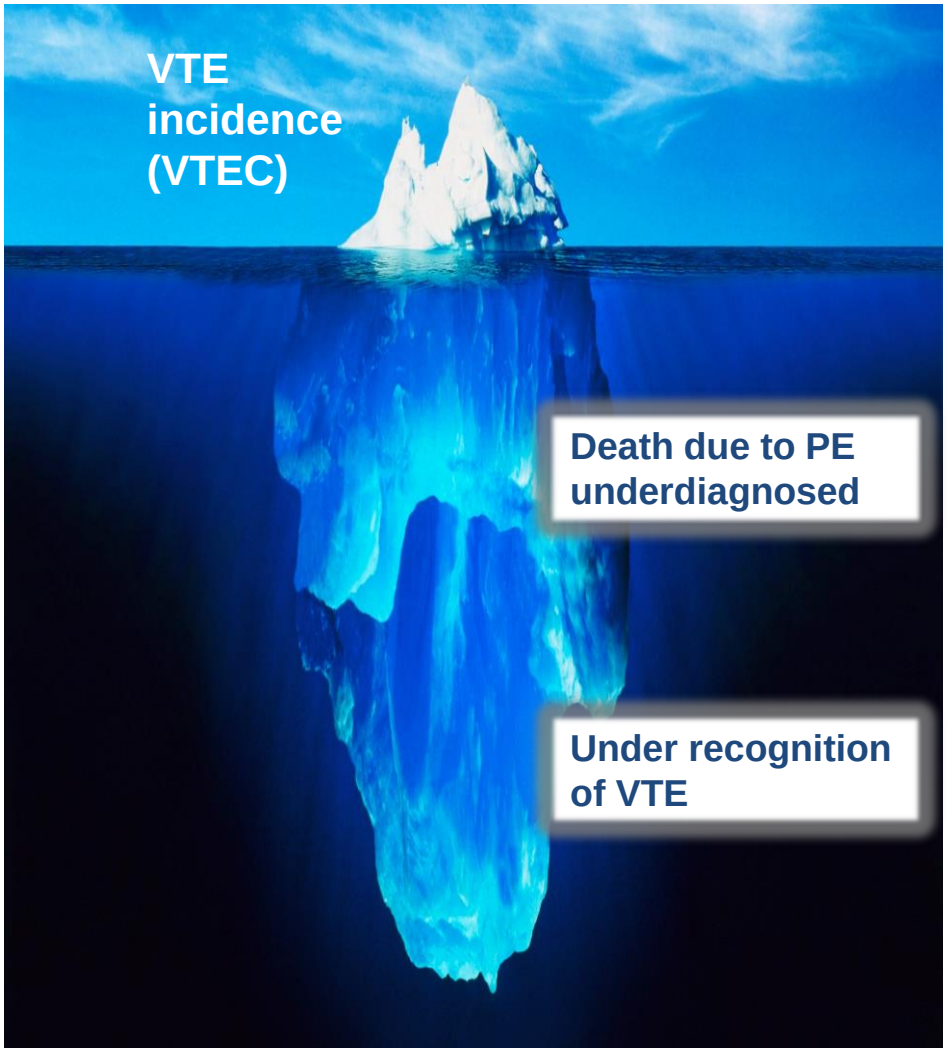
VTEC vs community incidence



- Incidence of definite and probable VTE (VTEC) is
  - **seven times** as high as that in the community (0.117 per 100PY)[1]
  - **twice** as high as that in elderly aged ≥ 70 years (0.44 per 100 PY)[2]
- Incidence rises to 21 times community incidence and up to five times in elderly if possible VTE is included

[1] Heit JA *Arterioscler Throm Vas Bio* 2008; [2] Tagalakis et al *American J Med* 2013

Undetected events?



- Post mortem proven fatal PE rate in hospital in-patients is 2.5%[1]
- Post mortem of nursing home residents found undiagnosed VTE to be cause of death in 8% of residents[2]

- Symptoms: non-specific / masked by comorbidity [3, 4]
- VTE is often silent in the geriatric environment[5]

[1]Bagbin et al, Journal of clinical pathology 1997;**50**(7):609-10; [2]Gross et al, Arch Intern Med 1988;**148**(1):173-6
[3] Masotti et al *Vasc Health Risk Mgt* 2008; [4] Righini et al *Jr Am Ger Soc* 2005; [5]Benoist et al *J Mal Vasc* 1994

- VTE incidence in our care home population is seven to twenty-one times higher than in the community

- VTE incidence (VTEC) is also up to five times as high as incidence in the elderly if possible VTE is included

- Care home residents are left at risk of VTE

Participants had a high risk of VTE yet

- None had VTE risk assessment
- Underuse of VTE prophylaxis

the bottom line is

Recommendations

- Further research
  - What makes this high-risk group really high risk?
  - How can we identify the very high risk residents?
  - Can we reduce outcomes by intervening?

- Raise awareness
  - Care home residents are a high-risk group for VTE

FAO care home staff & health professionals

Acknowledgements

- VTEC Investigators

Ellen Murray, Richard Hobbs, Andrea Roalfe, Carl Heneghan, David Fitzmaurice (PI)

- Funders
  - The Primary Care Research Trust Birmingham (PCRT)
  - National School for Primary Care Research (NSPCR)
- Independent adjudication committee

Jennifer Wimperis, Tim Nokes, Clare Taylor

- Participating care homes, residents, and GP practices
- Study staff

The views expressed are those of the authors and not necessarily those of the funders and / or sponsor.

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Thank you!

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Blood Clots Cancer and You Campaign + Cancer Chemotherapy & Clots (APPTG)

Eve Knight

CEO, AntiCoagulation Europe

Blood Clots, Cancer + You

anticoagulation EUROPE

The need for action

- It is estimated that up to 20% of patients with cancer experience venous thrombosis

- There is a fivefold higher annual incidence of thrombosis among cancer patients, with about 1 in 1,000 in the general population and 1 in 200 in cancer patients.

Blood Clots, Cancer + You

anticoagulation EUROPE

Campaign objectives

- Highlight the **severity and significance** of Cancer-Associated Thrombosis (CAT)
- **Optimise diagnosis** of CAT by increasing clinical awareness of the signs and symptoms
- Emphasize the need for **earlier patient awareness** of CAT

Blood Clots, Cancer + You

LEO

Some Current thinking

> Cancer patients have lots of access to hospital so unlikely to have undiagnosed VTE or delayed diagnosis

> Information overload…
>
> Don’t want to overwhelm patients and detract from neutropenic sepsis

Blood Clots, Cancer + You

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?

How many deaths did CAT account for in 2014 ?

1) 1531
2) 3998
3) 2776

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Impact of CAT on cancer patients

October 2014: 3998 deaths recorded in England and Wales

New figures for **2015** are

Unnecessary deaths from CAT are increasing

Data from APPTG updated report

Impact of CAT on cancer patients

The average annual increase in cancer deaths in which VTE is also listed as a cause of death is over **four times higher** than the average annual increase in overall cancer deaths

Data from APPTG updated report

Impact of CAT on cancer patients

- In 2015 only **35%** of trusts had a dedicated policy or pathway for CAT.

Just one in three

- Still **less than half of trusts** are providing patients with verbal and written information about the risk of developing a blood clot and the symptoms to look out for.

Data from APPTG updated report

Impact of CAT on cancer patients

- Lots of information on neutropenic sepsis but **not warned about blood clots**
- Angry they did not know what to look out for – **could have been prevented** – caught earlier
- **Too much to cope with** – the last straw
- I thought I was doing fine, chemo was working – **then this!**

PELICAN – Key Findings 1

- The CAT journey was considered a distressing one, with **limited support or information**, different to cancer treatment.
- **Little ownership for the management of CAT**, which further added to their distress.
- **Low awareness of CAT among HCPs**. When patients presented with symptoms of DVT/PE, **alternative diagnoses were often considered first**
- Patients started on LMWH were **quickly discharged with limited explanation and/or support**

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Noble S et al. Patient Prefer Adherence. 2015 Feb 24;9:337-45

PELICAN – Key Findings 2

- Due to low awareness, patients present for treatment late.
- Some patients **identified** symptoms of VTE **as a worsening of their cancer**
- Most patients had heard of VTE, **none had been aware of an association between VTE and cancer**
- Patients **unaware of risks of thrombosis or symptoms to look out for**
- **None** of the patients recalled being **told of the VTE symptoms** which would require medical attention

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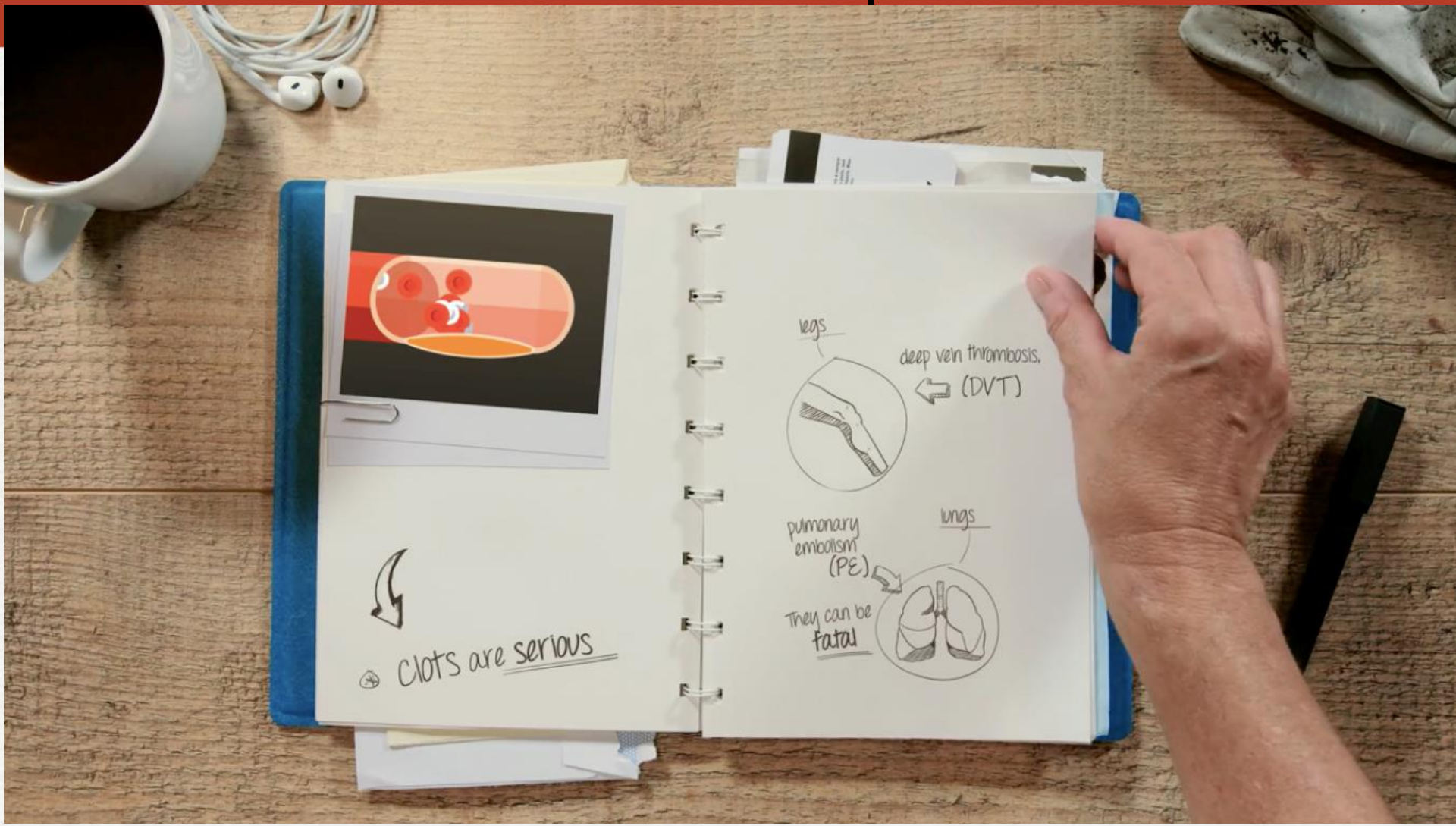
Noble S et al. Patient Prefer Adherence. 2015 Feb 24;9:337-45

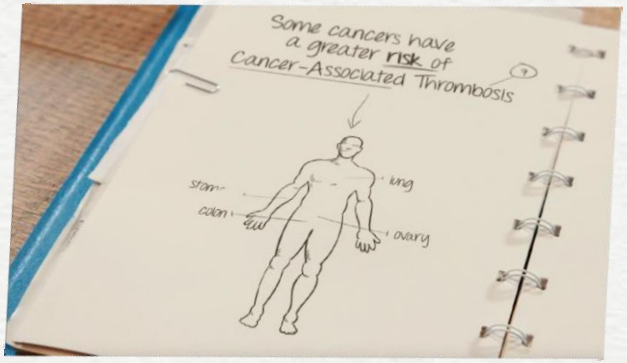
Information for patients



http://www.anticoagulationeurope.org/cancer-blood-clots

Blood Clots, Cancer and You

- Few cancer charity websites include information on CAT, but **awareness at an early stage is vital**



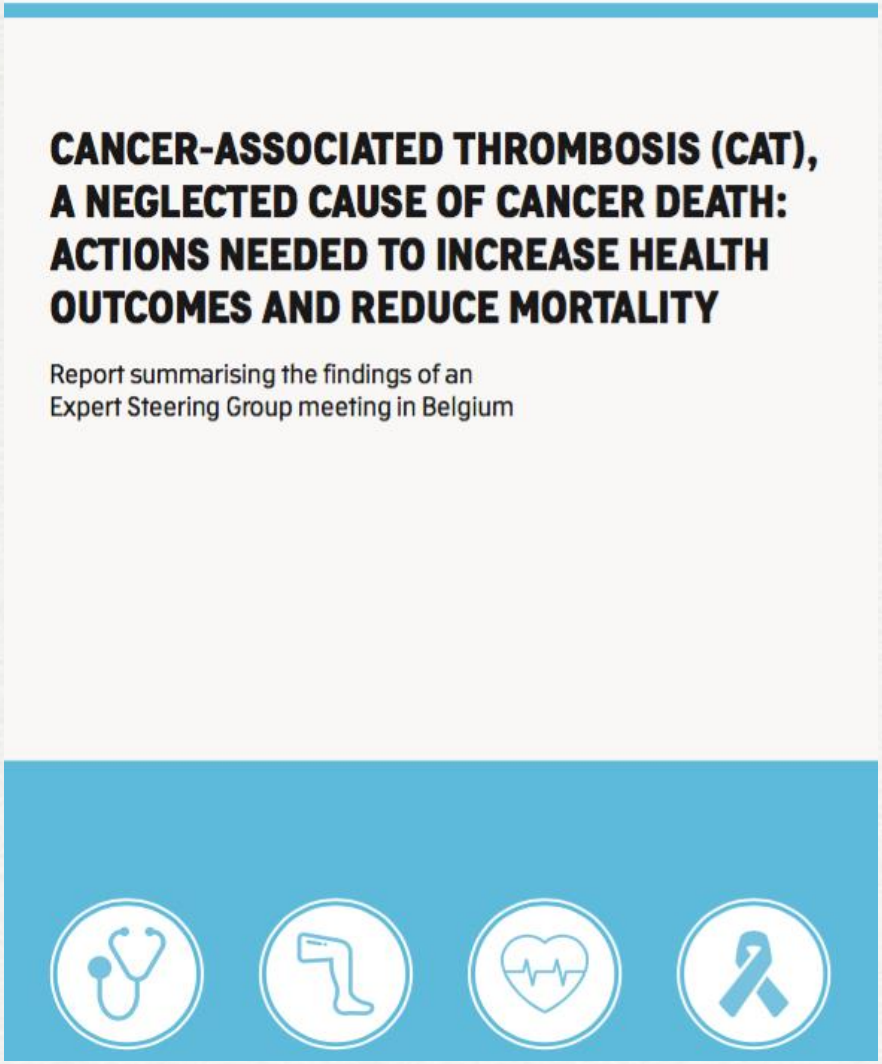
The Blood Clots, Cancer and You animation provides simple information, hints and tips on how to avoid CAT and signs and symptoms to watch out for

The CAT alert card has also been produced to give patients key information about blood clots and who to contact if they are concerned

LEO Pharma have funded and developed in partnership with Anticoagulation Europe

Taking campaign to Europe

- Expert European Steering Group
- Develop CAT White Paper
- Presented to EU Parliament on WTD 2016
- Road Map for change



And finally…

- CAT is an important clinical problem
- CAT can kill
- VTE risk assessment and, if appropriate, thromboprophylaxis of patients with cancer, are key to individualised care
- Nurses can make a huge difference
  - ➢ raise awareness, information, early diagnosis, effective treament, follow-up

Thank you

Learn more at:

www.anticoagulationeurope.org

www.CAThrombosis.com

Blood Clots, Cancer + You

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Promoting
Awareness, Research & Care of Thrombosis

www.thrombosisuk.org

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Awareness • Research • Care

Thrombosis UK – Expanding team

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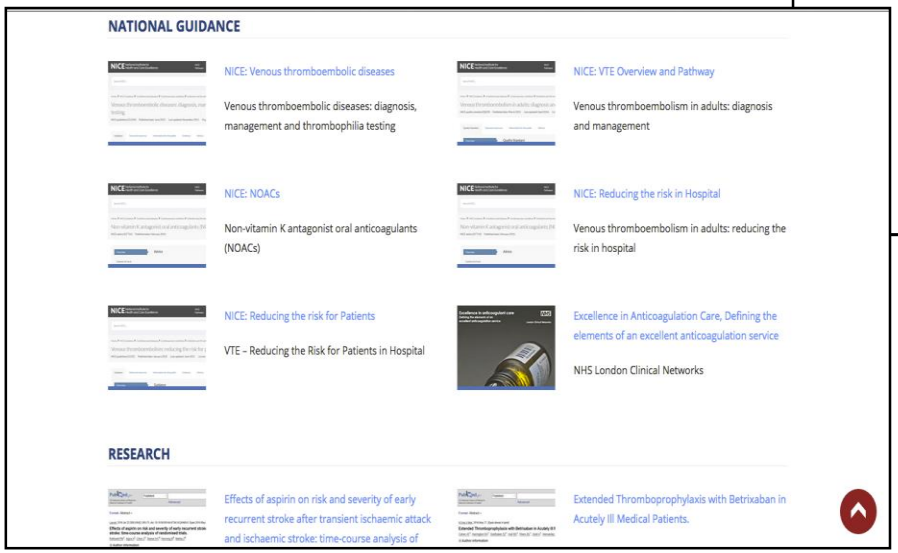
Newly launched website providing published Guidance – Research – Training



HCP - Travel Fellowship Grants

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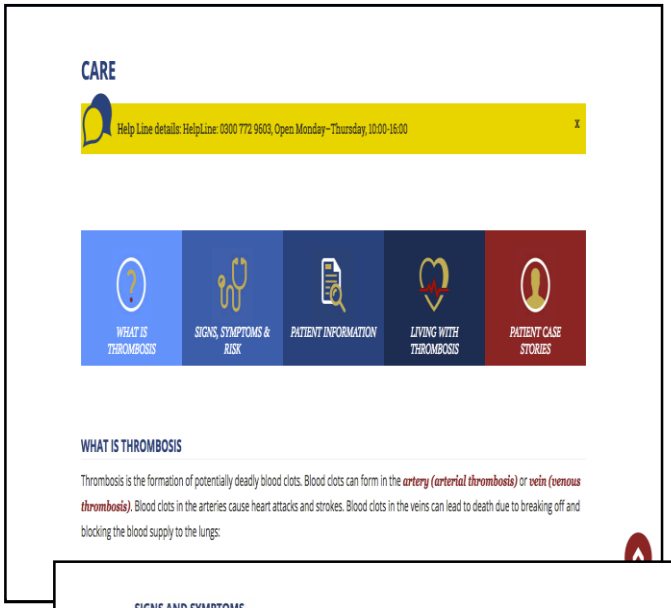
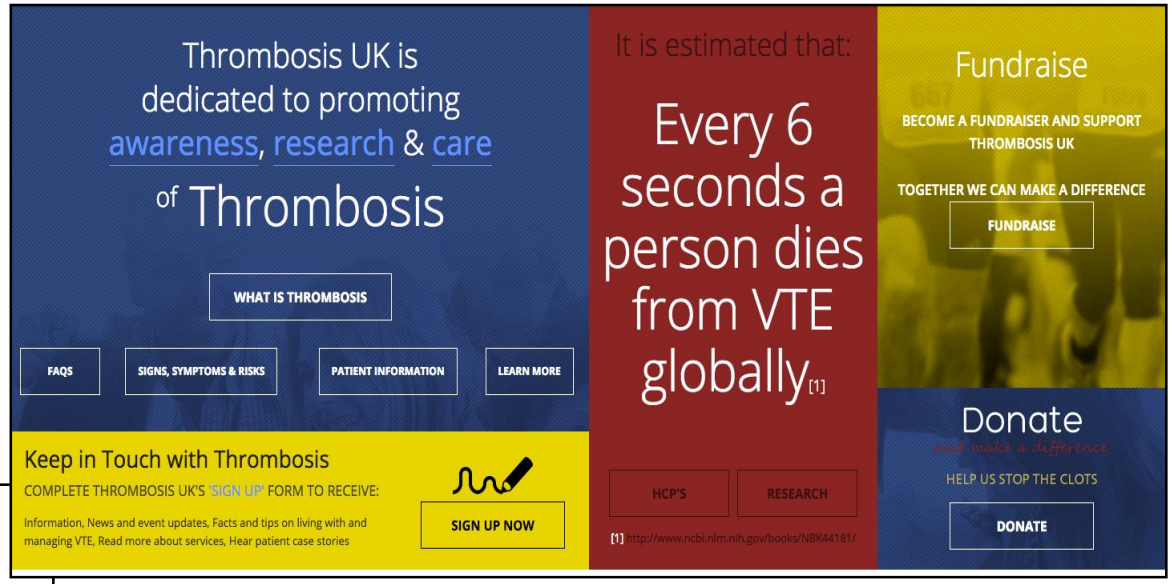
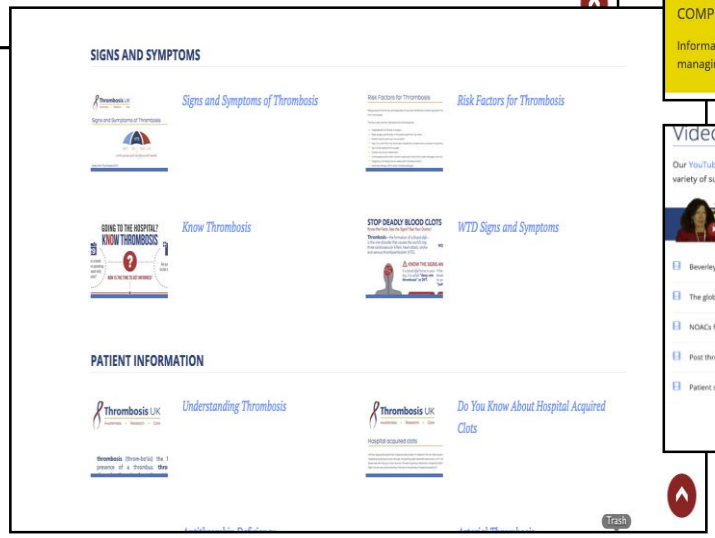
Patient and General Public

News - Awareness - Resources







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Working together to improve outcomes

FREE INFORMATION & AWARENESS MATERIALS

- ORDER
- DOWNLOAD
- AUDIO VISUAL AIDS
- UPDATES
- DISCUSSION
- SUPPORT

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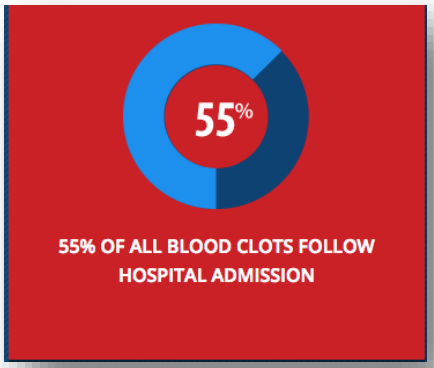
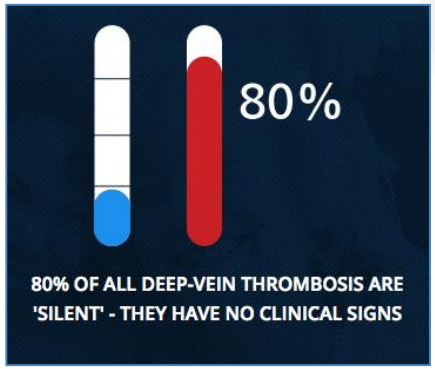
National & Regional Educational Meetings – for Patients & HCPs

- ✓ **Anticoagulation symposium**
- ✓ **VTE and women – from contraception to pregnancy**
- ✓ **VTE prevention**
- ✓ **Supporting psychological effects**
- ✓ **Interactive workshops**
- ✓ **Scotland**
- ✓ **Ireland**
- ✓ **Wales**
- ✓ **England**





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KNOW THROMBOSIS

The global movement to stop blood clots and save lives.

Join Us

As a partner, supporter, community mobilizer.
More than 400 groups already have. **Will you?**

Stay Connected at WorldThrombosisDay.org

Did you know?

Up to 60% of all VTE cases occur during or after hospitalization, making it a leading cause of preventable hospital death.
Education and prevention are key to reducing death and disability.

WorldThrombosisDay @ThrombosisDay ThrombosisDay WorldThrombosisDay WorldThrombosisDay

WTD Update

www.worldthrombosisday.org

Awards, advocacy, informing policy makers

Dr Catherine Calderwood, CMO

http://thrombosisuk.org/audio-visual.php

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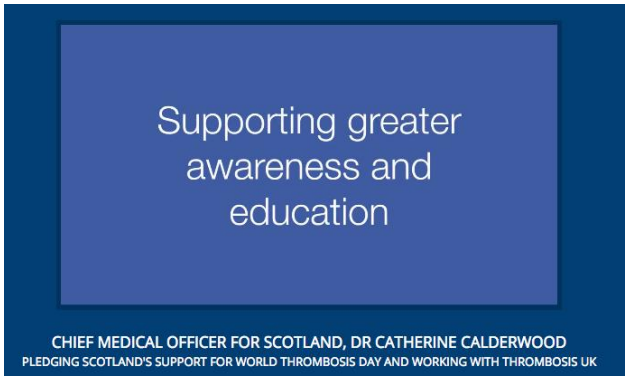
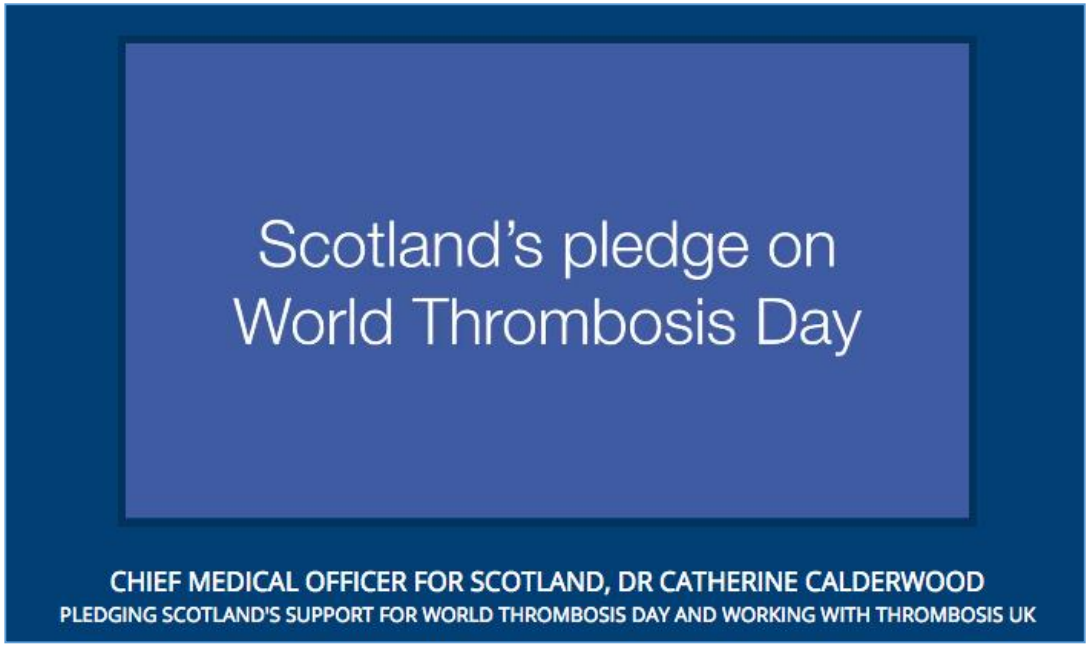
Engaging Policy Makers to support sustainable change





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Awareness

‘Focus on Thrombosis’

Shining a light on Thrombosis through survivor accounts

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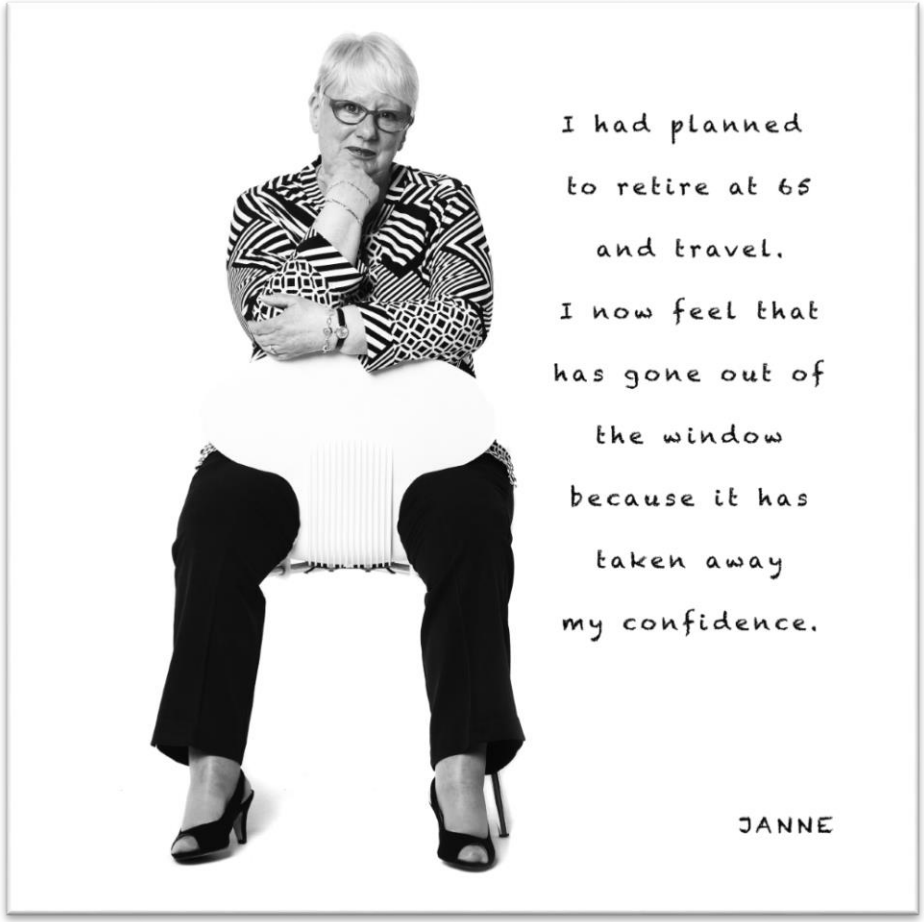

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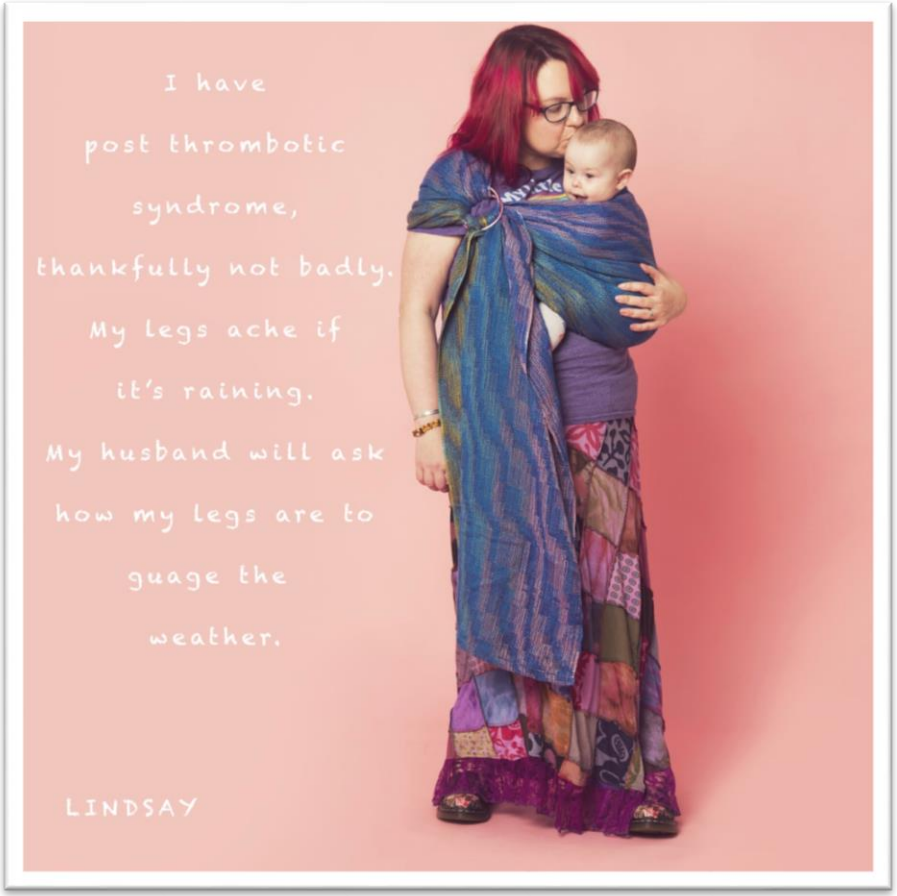

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Rob

Rob James was a very healthy young man who took great pride in his fitness as well as being an accomplished brewer.

He had recently taken up touch rugby and while playing for the Maersk Rugby Team Rob snapped his Achilles tendon, an everyday injury so everyone thought, but the ensuing tragic events proved otherwise.

In 2013 Rob James, suddenly and unexpectedly succumbed to a fatal pulmonary embolism.

Thrombosis can affect anyone

we can all make a difference by raising awareness

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Charlene

In 2015, Charlene Doolan, a young and healthy 36 year old woman, suffered a PE and tragically died.

Her family and friends joined forces to raise awareness of how thrombosis can affect any one of any age, and in the process fundraise too.

This amazing team took on the West Coast 500 challenge and in doing so completed the route in under 30 hours…

breaking the world record ….and raising awareness.

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Merry Christmas from Thrombosis UK

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