

# **Innovation and Impact**

# Monday 22 May 2017 Buckinghamshire Healthcare and Oxford Health

Accelerating health and economic gains for our region by working together

# Agenda

Time	Presenter (s)	Topic
16.00	Neil Dardis, Chief Executive, Buckinghamshire Healthcare	Introduction and welcome
16.05	Dr Paul Durrands, COO, Oxford AHSN	The AHSN – Innovation and impact
16.20	Dr Mandeep Singh Bindra, Consultant Ophthalmologist and Associate Medical Director, Research and Innovation Nicki Bromwich, Head of Strategic and Industry Partnerships, Oxford AHSN	Update on new Bucks Life Sciences Innovation Centre
16.25	Satinder Bhandal, Consultant Pharmacist, Bucks Healthcare	Stroke prevention in AF: spreading best practice and innovation
16.40	Mrs Georgina McMasters and Dr James Rose	Early Inflammatory Arthritis
16.55	Dr Brian Murray and Dr Chris Ramsay, Consultant Psychiatrists, Oxford Health	Memory services national accreditation
17.05	Karon Hart, Assistant Director HR (Operations and Wellbeing), Bucks Healthcare  Clare Sicklen, HR Director Janssen	Psychological wellbeing – a holistic approach the BHT Way  Physical health and wellbeing – a Johnson & Johnson approach (presentation to follow)
17.25	Dr Mandeep Singh Bindra, Consultant Ophthalmologist and Associate Medical Director , Research and Innovation	Interactive workshop - Fostering an innovation culture in Buckinghamshire Healthcare
18.00		Closing remarks and Light refreshments and networking

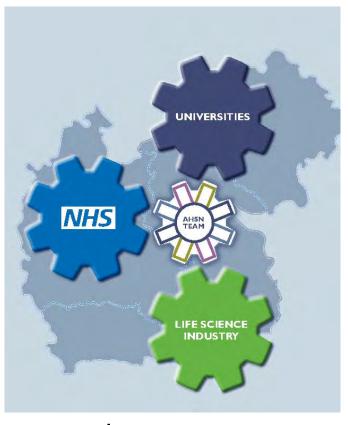


# **Innovation and Impact**

# Dr Paul Durrands Chief Operating Officer, Oxford AHSN

# **Oxford AHSN**

- 7 programmes and themes
- 100+ collaborative projects
- 50+ innovations
- 30+ industry partnerships
- 3 million people
- 11 NHS Trusts
- 65,000 NHS staff
- 9 universities
- Working with 4 STPs and 3 accountable care systems
- 750 life science companies
- 1 information governance framework all trusts signed up
- 2,020 newsletter subscribers and 2,950 Twitter followers



### ComRes independent stakeholder survey

- 563 respondents to survey (26% of those contacted) –
   more than 50% from NHS frontline
- 80% said network building culture of collaboration and partnership
- 64% said network adds value to their work
- "They're listening, identifying challenges and trying to help us solve problems" NHS provider
- "Without the likes of the AHSN small companies would really, really struggle to get any traction with the NHS"

# Highlight PPIEE



#### <u>leadingtogether@oxfordahsn.org</u>

#### **Leading Together Programme**

"What you've been doing here is the way to go: professionals and citizens working together to make health and wellbeing better. Just being in the room the patient or lay person changes the conversation."

Jeremy Taylor, Chief Executive, National Voices

# Highlight Workforce Health and wellbeing



"Physical activity reaches the very foundation of illness and helps prevent 23 diseases including depression, diabetes and dementia. An active workforce results in 27% fewer days lost to sickness with productivity increasing by up to 15%" Dr William Bird, Intelligent Health

"No effort is too small. Start wherever you can and keep going"

# **Highlight Sustainability**





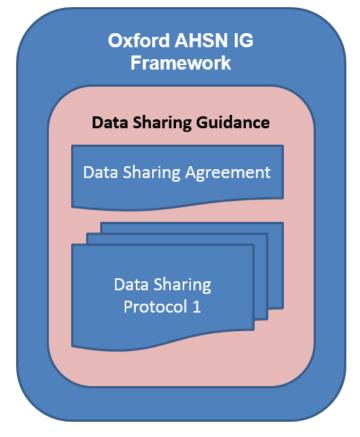
#### **Highlight Dementia Clinical Network**

Webinar programme promotes stakeholder engagement, professional development and dissemination of research

- Fortnightly webinars presented by clinicians, managers and academics, local and national
- 37 webinars run so far, mailing list of 350 people from AHSN geography and beyond
- Topics included
  - Dementia and depression
  - Role of speech and language therapist in the memory clinic
  - Safe and effective prescribing for older adults
  - A roundup of RCTs
- Post-diagnostic support in a memory assessment service
- Respondents to survey reported that more than half of the webinar attendances had resulted in change of practice

Webinar participant

# Highlight Data sharing across the region



"The Oxford AHSN team has created an exemplar for information-sharing between partner organisations"

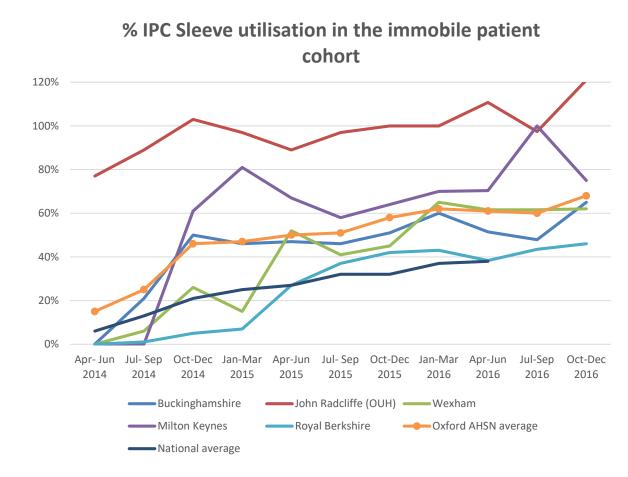
Dr Chris Bunch, Oxford University Hospitals Caldicott
Guardian

#### Wide range of clinical areas and technologies examples

Clinical Area	Medicines	Medical Devices	Digital Health	Diagnostics
Stroke	• NOACs	<ul> <li>Intermittent Pneumatic Compression Sleeves</li> </ul>		Point of care
Diabetes			<ul> <li>Gestational Diabetes Monitoring</li> </ul>	
Sepsis				<ul> <li>Curetis         Unyvero™         system</li> </ul>
Safety		<ul><li>Pneux</li><li>WireSafe</li><li>Non-injectable connectors</li></ul>	<ul><li>Intelligent Ultrasound</li></ul>	
Respiratory				<ul> <li>Circassia NIOX® FeNo Point of Care (PoC)</li> </ul>
Patient mobility		<ul> <li>Gyroset</li> </ul>		
Ambulatory care			<ul><li>Isansys patient monitoring</li></ul>	
Prevention				<ul> <li>Somascan</li> </ul>

# Adoption example Intermittent Pneumatic Compression Sleeves

- AHSN approach has significantly increased IPC sleeve utilisation rates compared to the rest of the country.
- Over 16/17 performance across the region remained steady, increasing to an average of 68% for Oct-Dec 2016
- OHE independent study found that driving adoption beyond national average prevented an additional 22 DVTs, 2 PEs and 12 deaths over first 18 months of project
- Assuming utilisation maintained by end of AHSN licence, 2500 patients across the region will have received IPC sleeves. This represents the potential for 125 fewer DVTs, 75 fewer deaths and 13 fewer PEs over the lifetime of the project.

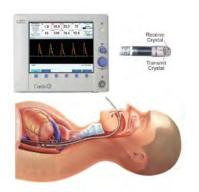


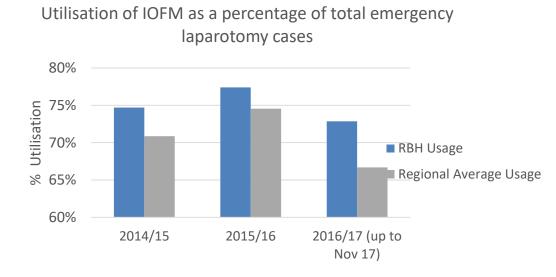


# Adoption example Intra-Operative Fluid Management (IOFM)

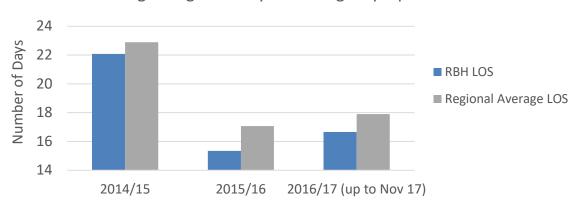
 Use of IOFM Technology enables anaesthetists to monitor patient's hydration status during major and high-risk surgery

- Utilisation of IOFM at RBH in emergency laparotomies has been higher than the regional average over last 3 years of project
- RBH achieves one of the lowest LOS for emergency laparotomy procedures in the region which could be linked to IOFM usage





#### Average Length of Stay for emergency laparotomies



Source: NELA audit data Year 1-3

# Examples of innovation – latest projects to improve patient safety

 Read more in our Patient Safety annual report – copies available here today

#### Non-injectable arterial connector



This improves safety for all patients requiring an arterial line in operating theatres and intensive care by preventing drug administration via the wrong route, bacterial contamination of the arterial line and blood spillages.

#### WireSafe



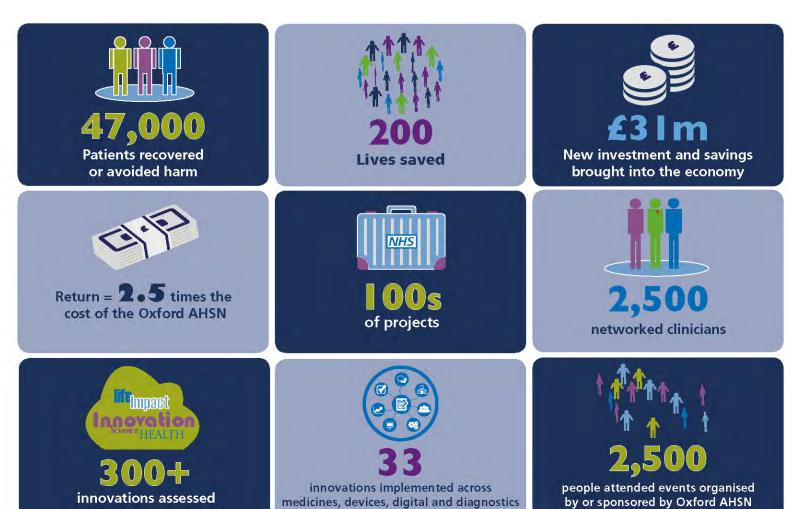
This is an engineered solution to prevent retention of the central line guidewires that are used when inserting large catheters into central veins.

#### PneuX System



A cuffed ventilation tube and an electronic cuff monitoring and inflating device that prevents leakage of bacteria-laden oral and stomach contents to the lung.

# **Impact**



Sector	Indication	Product	Setting
Diagnostics	Range of markers	iStat (PoC)	Out of Hours
Diagnostics	Infection	FBC, CRP Microsemi	Acute
Diagnostics	Cardiovascular	SomaScan CV	Primary
Diagnostics	Stroke	РоС	Ambulance
Diagnostics	IBD	Calprotectin	Acute
Diagnostics	Pre-eclampsia	Elecsys	Acute
Diagnostics	Asthma/COPD	NIOX FeNo	Primary
Digital	Oncology	Digital stratification tool	Primary/Acute
Digital	Digital audit	Ultrasound	Secondary
Digital	Vital signs	Patient Status Engine	Ambulatory
Medtech	Wheelchair control	Gyroset for quadraplegics	Rehab/Home



#### **Examples of Diagnostic Projects**

In Progress



- Extension from using point of care diagnostics in the EMUs to Out of Hours GP vehicles for use in the community sponsored by a health foundation grant
- Study will assess the benefits of PoC in an Out of Hours setting using Abbott iStat





- Evaluation of Horiba Microsemi<sup>CRP\*</sup> in Oxford University Hospitals
   NHS FT, Stoke Mandeville Hospital and Wexham Park
- Testing of a CRP and whole blood assay in emergency departments to better diagnose those children with severe infection and to reduce unnecessary admissions





- Assessment of proteomic profiles using SOMAScan® of NHS
   Health Check participants in collaboration with GP practices in
   Bucks
- Develop a model of risk across the study population that assesses the impact of pharmacological and lifestyle interventions





- Offers a single protocol for sample preparation with potential to assess a 100 analytes within a few hours in a PoC setting
- Assessment of Unyvero system in infectious diseases in Oxford University Hospitals NHS FT and Royal Berkshire Hospital about to start

#### **Examples of projects the trusts are involved with:**

Programme	Example
Best Care	Dementia and accreditation of memory clinics and webinars
	Anxiety & Depression - IAPT
Clinical Innovation	Excellence in AF - NOACs
Adoption	Intra Operative Fluid Management
	Bucks CC work on alcohol and drug misuse
	Data sharing for falls
Industry Partnerships	Life Sciences Innovation Centre
	SOMAScan™ for primary care
Patient Safety	Use of paediatric sepsis screening tool
	Reducing admissions from AKI
	Reducing pressure ulcers
	CAUTI in the community

### **Future**

- Innovations need to get into the NHS more quickly and cheaply
- The AAR identified AHSNs as playing a key role in identifying and adopting new transformative products
- Oxford AHSN focus on Innovation Adoption, Industry Partnerships and Patient Safety
- Innovation medicines, medical devices, digital technology and diagnostics
- Different challenges to adoption even for innovation with strong case for adoption – eg need for pathway changes, funding changes, affordability, clinical leadership capacity



### Accelerated Access Review: Final Report

Review of innovative medicines and medical technologies

An independently chaired report, supported by the Wellcome Trust.





### **Buckinghamshire Life Sciences Innovation Centre**

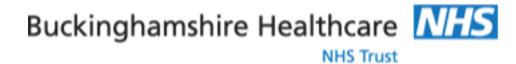
Nicki Bromwich

Head of Strategic and Industry Partnerships

### **Buckinghamshire Life Sciences Partnership**

Delivery Partners

Strategic Partners















# **Objectives**

- To attract small businesses (SMEs) into Buckinghamshire
- To support and encourage healthcare entrepreneurs to generate innovations and create new businesses
- To support companies to grow and to create new jobs

#### **Benefits**

- To raise the profile of partner organisations and improve recruitment & retention of staff
- To act as a catalyst to strengthen the innovation culture locally, and to potentially attract additional R&D activity and funding
- To support faster adoption of innovative products into the NHS thus benefiting patients

### Aim

- To offer support and office space (to rent if required) to selected small companies developing products of interest to the health and social care system
  - self-care, prevention, LTC management and keeping people well and out of hospital
  - devices to support primary, community and acute care
- Medtech devices, digital health, virtual reality, 3D printing, robotics, spinal and rehabilitation products, assistive & independent living or well-being and consumer products that address health and well-being and social care challenges

# Offer to industry

#### Opportunity to

- Meet and network with clinicians, and commissioners to facilitate discussions about healthcare delivery models, clinical pathways, and patient experience etc.
- Engage in early stage discussions and real-world testing and validation of products, to better support adoption of an innovative product within a clinical pathway,
- Access support to develop a robust health economic case and case for change that demonstrates improved patient outcomes & value for money
- Work alongside academics, clinicians, and staff within provider and commissioning organisations within an accountable care system to develop and co-create innovations

### **Bucks innovation initiatives**

#### Diagnostic innovation projects underway

- Horiba MicroSemi undergoing evaluation in the Children's A&E in Stoke Mandeville, using point of care CRP and whole blood count to better manage febrile children
  - Evaluation of Somalogic CVD9 panel to identify patients at higher risk of MI, heart failure or stroke. Possible extension to identify staff and patients of Buckinghamshire Hospitals most at risk of developing cardiac disease as part of a well-being programme
  - Point of Care test for BNP in managing heart failure
  - Consultant Cardiologist BHT, evaluating new Thermo Fisher marker copeptin for its effectiveness as an early and safe rule-out for myocardial infarction
  - Maternity network roll out of Roche pre-eclampsia assay into Buckinghamshire

#### BHT projects in partnership with Industry and Bucks New Uni

Cardiology, Ophthalmology, Burns & plastics, Spinal, Orthopaedics etc.

### **Bucks innovation initiatives**

#### **Live Well Stay Well programme**

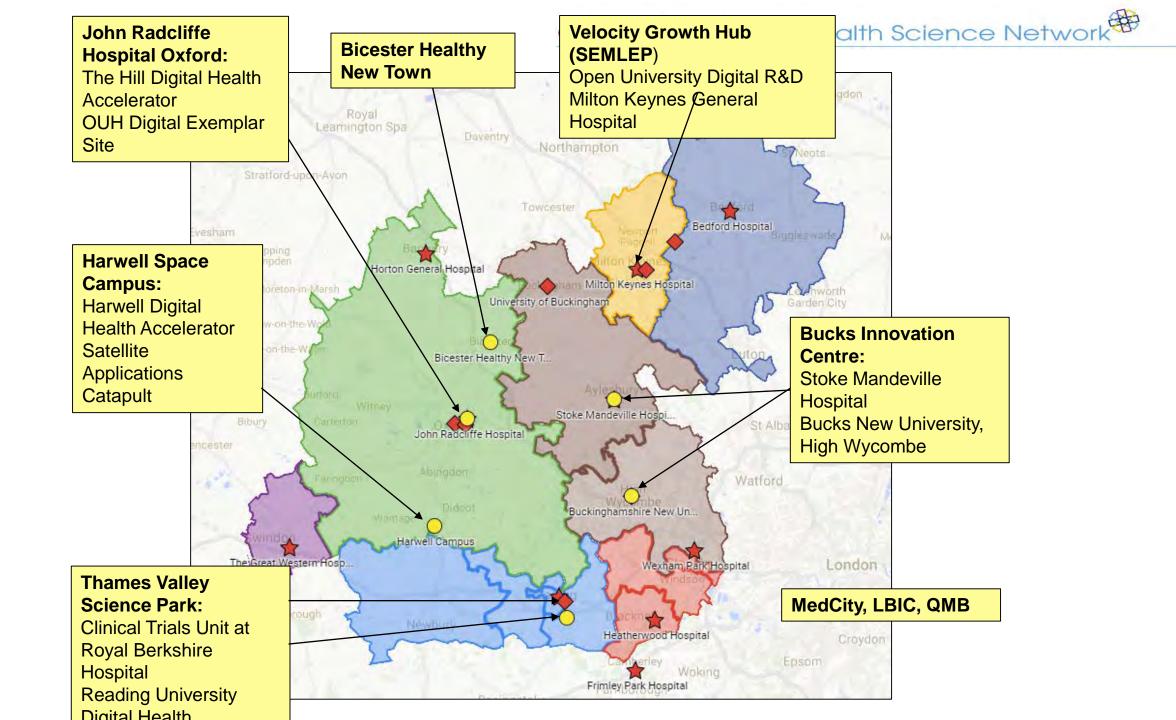
- Access to a 'testbed environment' currently working with companies including Easychange, Oviva,
   Digital Life Sciences, Map my Health and Somalogic
- Opportunities for future co-creation projects

#### **Health & Wellbeing activities**

BHT and J&J active participants in 'Get Physical' workshop in November

#### **Practical Innovators Course**

Funded by Oxford AHSN & HEETV and run by BNU with 8 staff from BHT in Sept 2016 cohort



#### **Buckinghamshire Life Sciences Innovation Centre**

#### **Space**

- LGF capital funding led by Bucks Healthcare NHS Trust
  - £1.3m for creation of 1208m<sup>2</sup> renovated innovation space
  - 555m<sup>2</sup> 2<sup>nd</sup> floor BNU South Wing
  - Suite of 6 flexible innovation spaces in the PGEC at Stoke Mandeville

#### **Funding**

- £750K ERDF revenue over 3 years led by Bucks New University
- Delays due to Brexit but funding due late summer





# **Facilities**





#### **Specialist facilities and expertise**

#### Access to

- On site clinicians and patients to support the testing and validation of products
- Laboratory, workshop, prototyping,
   CAD and digital design facilities
- State-of-the-art and Guardian prize winning clinical simulation suites for hire
- State-of-the-art elite athletic performance and sports medicine facilities including cameras and motion sensors
- State-of-the-art gaming facilities & technicians for product development
- Mentoring opportunities with Johnson & Johnson companies and GE Healthcare

# **Next steps**

- Develop implementation plan for 'launch' end 2017
- Appoint lay members, chair etc.
- Engage more clinicians
- Plan communication materials and launch event
- Industry engagement events

# Fostering an innovation culture in Buckinghamshire Healthcare

# What do we need to do to build an innovation culture within the Trust?

- Who do we need to involve and do we need them to do?
- What can the Trust do to facilitate this?
- What support can we gain from external partners?



# Stroke prevention in AF: Spreading best practice and innovation

Satinder Bhandal, Consultant Pharmacist, Buckinghamshire Healthcare

### The burden of atrial fibrillation

#### What is atrial fibrillation?

- Atrial fibrillation (AF) is the most common sustained cardiac arrhythmia
- 1.5 million people in England are estimated to have the condition with one third undiagnosed
- Prevalence rises with age
- It is anticipated that the number of people with AF will double over the next 20 years
- AF is a major cause of stroke (20% of all strokes)
- Having AF increases a person's stroke risk by around 20%
- Strokes caused by AF tend to more severe with higher mortality and greater residual disability



#### What can healthcare professionals do?

- Many cases of AF are detectable by a simple pulse check
- Anticoagulation therapy with warfarin or a NOAC reduces stroke risk by two thirds from around 8-10% to 2-3% per annum

# **NOACs and Warfarin**

- NOACs have been recommended by NICE for stroke prevention in AF since 2014.
- NOACs are effective as warfarin and offer an alternative to warfarin treatment for
  patients who cannot take warfarin, who are poorly controlled on warfarin or who could
  not comply with the treatment regime..
- Despite this, uptake of NOACs nationally has been slow with cost and GP confidence in prescribing often cited as a factor.
- Each year there are an estimated 250 strokes (including approx. 70 fatal strokes) in the Oxford AHSN region that may have been preventable had the patient been prescribed anticoagulation.
- Even if all AF patients were treated with the most expensive oral anticoagulant 31 patients could be treated for the cost of 1 stroke.

#### **HOW DO WE SOLVE THIS ISSUE?**



- Set up in 2012
- Led by Consultant Anticoagulation Pharmacist
- Team of Specialist Pharmacists
- GPs and Hospital Doctors refer patients requiring anticoagulation
- Risk assessment carried out to determine whether anticoagulation clinically appropriate
- 30 minute consultation to explain risks & benefits and improve compliance
- Pharmacists skilled at determining appropriate drug to suit the patient
- Joint decision making with patient:
- 1) To anticoagulate
- 2) On choice of drug



Anticoagulation rates significantly improved across Buckinghamshire – now Chiltern CCG is 3<sup>rd</sup> highest in the country

# **Spreading innovation**

- Other CCGs within Oxford AHSN region interested in Bucks model but difficult to get business case approved
- Joint bid to Pfizer Oxford AHSN and Buckinghamshire Healthcare Trust
- Awarded £99.5k to run proof of concept of Pharmacist-led anticoagulation initiation service in primary care
- Pharmacists provided by BHFT
- Project management and evaluation provided by Oxford AHSN
- Pilot running across 7 CCGs in Berkshire
- Expected that the project will improve anticoagulation rates and also adherence to medication regimes
- Aim is that CCGs will substantively commission the service following the proof of concept



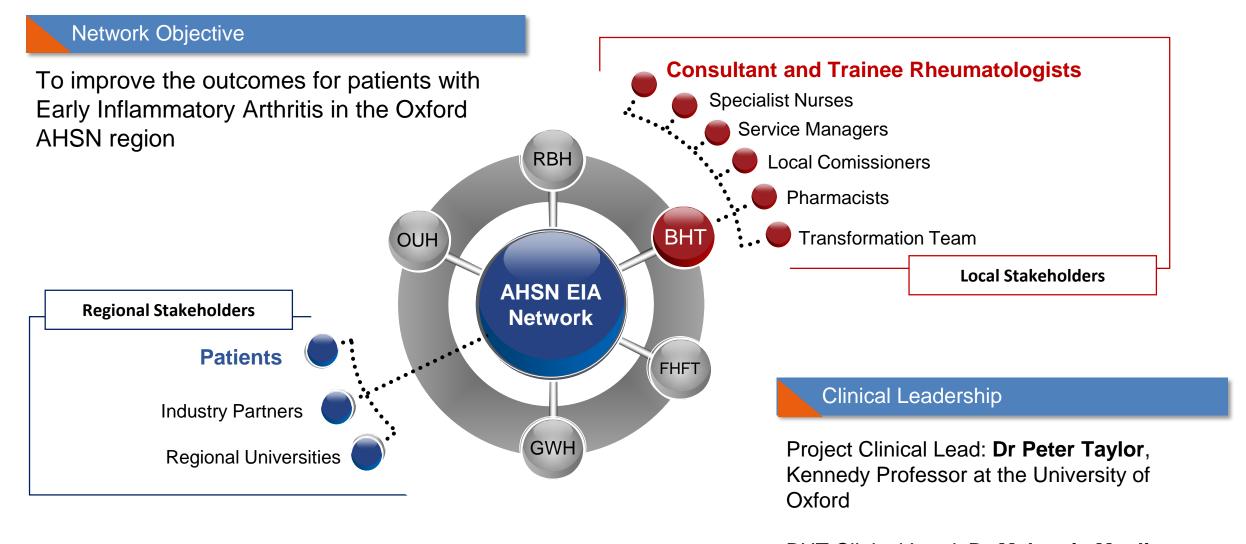
# Oxford AHSN Early Inflammatory Arthritis Network

A Patient's Perspective

Dr James Rose & Georgina McMasters

#### The Oxford AHSN Early Inflammatory Arthritis (EIA) Network





BHT Clinical Lead: **Dr Malgosia Magliano**, Consultant Rheumatologist

#### The Oxford AHSN Early Inflammatory Arthritis (EIA) Network



#### Patient Engagement with the Network

#### What Patient Engagement has there been?

- Recruited an exceptional Patient Champion
- Built working relationship with National Rheumatoid Arthritis Society (NRAS)
- Bought together panel to provide insight into projects
- Working with all to deliver high quality patient targeted materials

#### Patient engagement has been core to network projects

- Validating gaps in patient awareness and understanding
- Ensuring network projects are delivering to the needs of patients
- Optimising local services to maximise patient experience

#### A Patient's Perspective

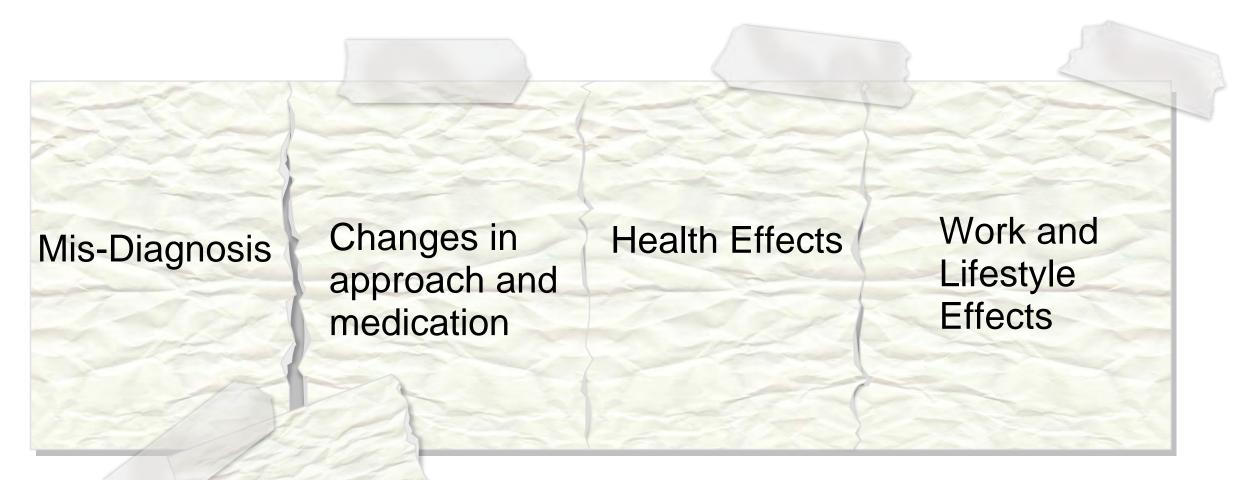


How I became involved with patient/public health experience work in the Oxford AHSN?



#### My experience of living with inflammatory arthritis



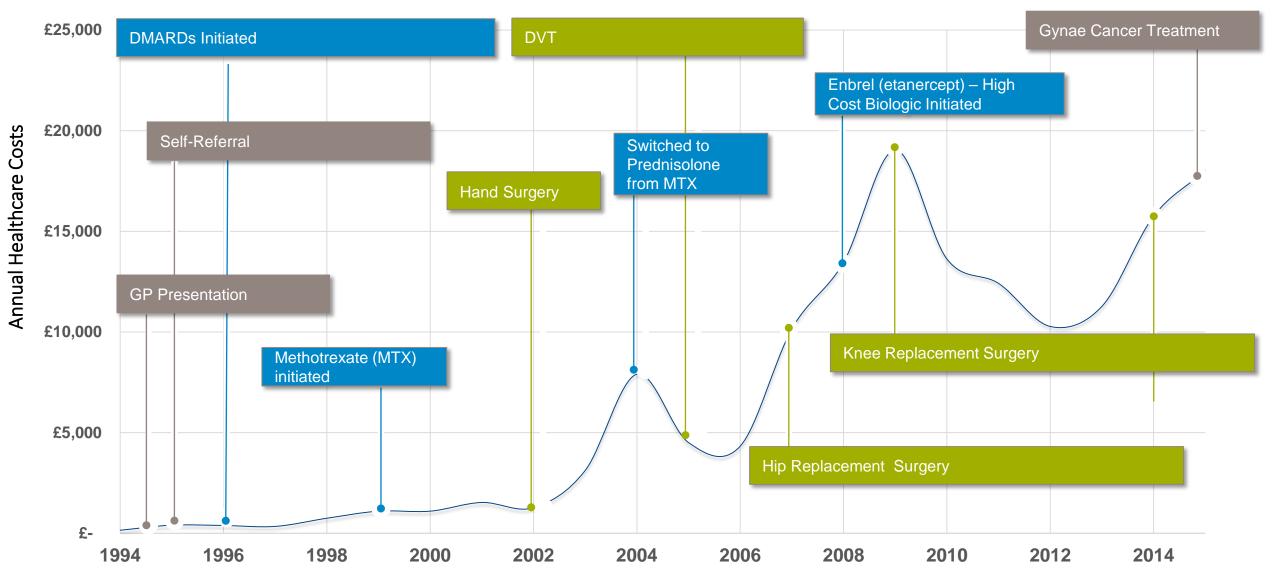


Cost of getting it wrong

#### **Delayed Treatment of EIA**

#### The Human Cost and The Healthcare Cost





#### How we are making a difference

#### **Issues and Projects**

- Public awareness
- GP awareness and quick referral to secondary care
- Patient and professional understanding of biologic and biosimilar medications and the effect of change on patients

#### **The Future**

- Better public understanding
- Better gp recognition
- Better outcomes for patients
- Different aproaches to care, self care and monitoring.

#### Questions







# **Buckinghamshire MSNAP Accreditation**

Dr Chris Ramsay, Consultant Old Age Psychiatrist, Oxford Health NHS FT Dr Brian Murray, Associate Medical Director, Oxford Health NHS FT

### Introduction to MSNAP

- Memory Service National Accreditation Programme (run by Royal College of Psych)
- Comprises: national standards, support, peer and 'formal' review to improve quality of memory clinics (MC)
- No 'One size fits all' MC model
- Currently 171 standards (soon to be 240!)
- Standards 1 (essential) 3 (aspirational)

### **MSNAP Standards**

- 1. Management
- 2. Resources
- 3. Assessment
- 4. Follow up and support
- 5. Pharmacological interventions
- 6. Psychosocial interventions

# Motivators for gaining accreditation

- Quality improvement
- Reduce unwanted variation
  - Key focus of Academic Health Services Network (AHSN)
- 'Kitemark'
  - Commissioners
  - Staff morale
  - Patient and carer confidence



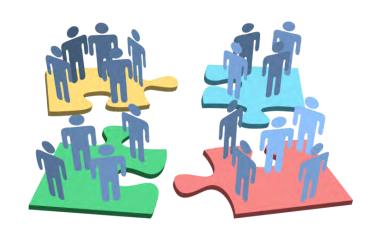
### **Collaboration and leadership**

- Coordinator/leadership role
  - AHSN sponsored (M Cundell)
  - Cascade information to individual teams
  - Lobbied to achieve changes at Trust level e.g. Cognitive
     Stimulation Therapy
  - Liaise with clinical governance groups, audit team and Patient and Advice and Liaison Service
- Leads for each service
  - Regular meetings with coordinator and updates via e-mail
- Advice and support from MSNAP



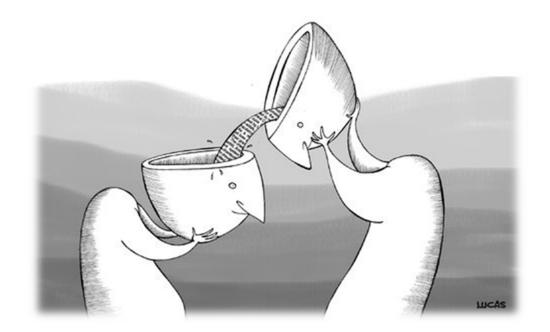
# **Engagement with key stakeholders**

- Executive support
- Commissioners
- CQC inspection
- Staff
- Patients
- Voluntary sector / partners



### **AHSN links**

- 'Learn from the best'
  - Advice sought from local services accredited as excellent
  - Generous with advice and reassurance



# Quality improvement cycle

- Benchmarking
  - CMHT/memory service meetings
    - MSNAP checklist
  - Monthly measures of improvement
- Task groups for specific standards
  - Patient and carer involvement, training, policies etc.
- Evidence
  - Paper files
  - Electronic record facilitate data sharing between teams





### Preparation for peer review

- Formal MSNAP Peer Reviewer training
  - One staff member per team
- Attendance at external peer reviews
  - Sharing of ideas as to how to meet standards
  - Better understanding of accreditation processes
- 'Mock peer reviews'
- Early recruitment of sufficient patients and carers
- Involvement of third sector partners



#### **Outcomes**

- All six memory clinics accredited by January 2016, three receiving 'excellent' rating
- Improvements embedded at service and individual clinician level
- Positive change in policies and procedures
- Patient and carer experience
  - Improved feedback from service users
  - Improvements in physical environment
  - Increased opportunity for research involvement
- Improved multi-disciplinary and inter-agency working
- More efficient use of resources e.g. nurse assessment in GP surgeries, administrative



# SUCCESS

Because you too can own this face of pure accomplishment

# Oxford Academic Health Science Network









### On-going development & innovation

- Maintain momentum generated by MSNAP
  - Regular review against changing standards via quarterly meetings / awaydays Trust wide
  - Development of Dementia Nurse Specialist
  - Further partnership working with commissioners, patients, voluntary sector & other providers (e.g.

CDC)

- New Standard Operating Procedure
- New webpage to promote services
- Video leaflet









# Health and Wellbeing Interventions; taking a psychological perspective in Buckinghamshire Healthcare NHS Trust

Karon Hart
Assistant Director HR ( Operations and Wellbeing)
karon.hart@buckshealthcare.nhs.uk



Safe & compassionate care,

# What do we mean by wellbeing?



"Growing the Health & Wellbeing agenda: From First Steps to Full Potential", CIPD Policy Report: January 2016

### **Business Benefits**

The most common benefits of investing in NHS staff health and wellbeing are:

- ✓ Reduced sickness absence and "presenteeism"
- ✓ Increased standards of patient care and advocacy
- ✓ Increased retention of staff and their skills
- ✓ Improved staff morale and positive culture
- ✓ Improved reputation as a 'good employer'
- ✓ Positive impact on recruitment
- ✓ Setting an example for other industries and employers to follow

# The NHS National Agenda

 Wellbeing is an integral part of good business functioning "NHS staff have some of the most critical but demanding jobs in the country.

When it comes to supporting the health of our own workforce, frankly the NHS needs to put its own house in order."

Simon Stevens, NHS England Chief Executive, 2 September 2015

April 2016 – CQUIN for Health and Wellbeing

# Focused need to tackle stress & mental health:

- Seen a rise in stress and mental health related absence for 6 consecutive years. (CIPD 2015 absence management survey)
- ➤ Health and Safety Executive estimated 9.9 million days lost to stress, depression or anxiety. (HSE 2014/15)

'Perhaps 2016 will be the year HR cracks it .... With more mental health initiatives catered for in organisational wellbeing packages.... Tailored support for line managers.... (and) employees to access appropriate help'

(People Management, Jan 2016)



#### **Encompasses implementing all these elements:**

Manager Training and Support

Fast track Specialist referrals

Sickness Absence
Workshops

Realistic and informed actions

Fast track to Physiotherapy

Quick response/ timely interventions

Understanding Stress
Building Resilience
Workshops

Fast track to Counselling

Wellness Recovery Action Plan

Occupational Health referrals

Resilience group work and team interventions

Case Conferences

1: 1 Resilience

**Health Summits** 

HR / Occupational Health liaison

Robust data collection Executive level support

Return to work interviews

# Why do we really need to do this in the NHS?

- Roles that involve caring for and helping people often mean neglect of our personal needs.
- There is a need to empower staff to look after their own health and wellbeing.
- If we enable staff to take a 'self-care' approach patient care will in turn benefit because;
  - Healthier staff deliver better care
  - Staff become natural advocates for Healthier lifestyles
  - Reducing staff sickness inturn reduces cancellations/ wait times for patients and pressure on staff

# The CARE values approach

- Collaborate with both internal and external stakeholders at a local and national level
- Aspire to provide a forward looking service that remains close the needs of BHT and also fits the national agenda
- Respect that everyone is unique in their health and support needs and developing a wider range of initiatives will ensure these needs are met
- Enable staff and patients to upscale their 'Self care' potential through support and encouragement.

# The future plans....

- To ensure the NHS as an employer sets a national example in the support it offers it's own staff to stay healthy
- To facilitate pro-active interventions to support staff and patient wellbeing improving their health outcomes
- To implement and embed CQUIN initiatives
- To enable the STP prevention agenda targets to be reached
- To support the holistic development of BHT as:

'A Great place to work'



# Fostering an innovation culture in Buckinghamshire Healthcare

What do we need to do to build an innovation culture within the Trust?

• What can we do as clinicians and staff?

• What can the Trust do to facilitate this?

• What support can we gain from external partners?