

Innovation and Impact

Thursday 4 May 2017

**Milton Keynes University Hospital
and Central and NW London**

Accelerating health and economic gains for our region by working together

Agenda

Time	Presenter (s)	Topic
16.00	Claire Murdoch, Chief Executive Central and North West London NHS FT Joe Harrison, Chief Executive, Milton Keynes University Hospitals NHS FT	Welcome and introductions
16.15	Professor Gary Ford, Chief Executive, Oxford AHSN	Oxford AHSN Innovation and Impact
16.35	Dr Stephanie Oldroyd, Consultant Clinical Psychologist, Lead Clinical Psychologist for Mental Health	The memory service and our work with the AHSN and the YPWD project
16.55	Alex Quinn, (formerly) Transformation CQUIN Project Manager	Learning and Innovation – Practical innovating in healthcare settings (Innovation Programme) – a personal view
17.10	Dr Venkat Hariharan, Consultant Anaesthetist, Milton Keynes University Hospital	Intra Operative Fluid Management
17.30	Nigel Keen, Chairman, Oxford AHSN	Closing remarks Networking and light refreshments

Welcome and introductions

Claire Murdoch, Chief Executive, Central and North West London NHS FT

Joe Harrison, Chief Executive, Milton Keynes University Hospital NHS FT

Claire.Murdoch@nhs.net

Joe.Harrison@mkuh.nhs.uk

Innovation and Impact

Professor Gary Ford CBE, Chief Executive, Oxford AHSN

Better patient care through innovation 2017

Showcasing the benefits of collaboration between universities, industry and the NHS



Date	Partners
2 May	Berkshire Healthcare/Royal Berks
4 May	Milton Keynes, MKUH/CNWL
16 May	Oxford University Hospitals
18 May	Oxford Health
22 May	Bucks Healthcare/Oxford Health
25 May	Patient safety conference

All meetings 4-6pm
followed by networking
and light refreshments

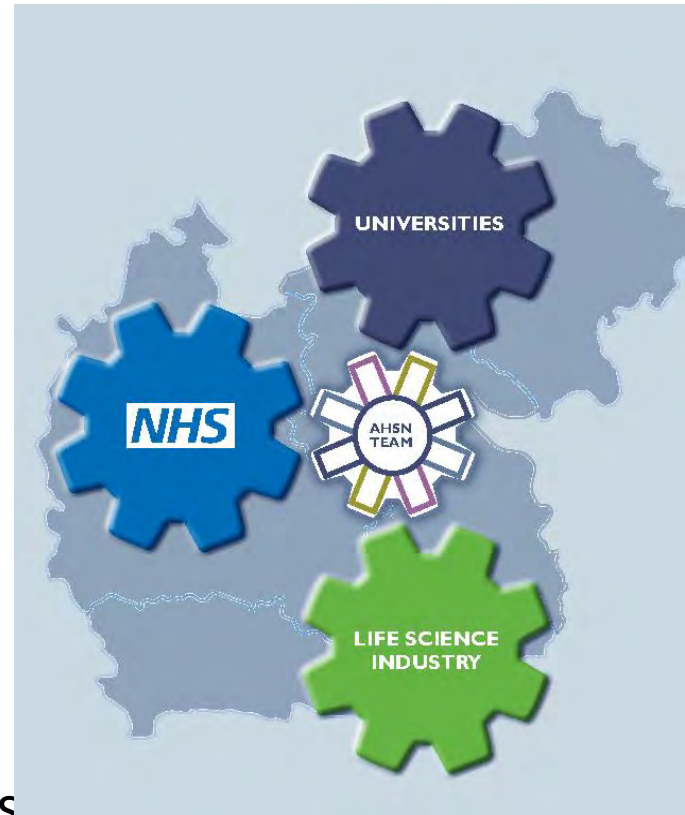
Further information:

bit.ly/partshow17

www.OxfordAHSN.org

E: info@oxfordahsn.org

- 7 programmes and themes
- 100+ collaborative projects
- 50+ innovations
- 30+ industry partnerships
- 3 million people
- 11 NHS Trusts
- 65,000 NHS staff
- 9 universities
- 4 STPs & 3 Accountable care systems
- 750 life science companies
- 1 information governance framework – all 12 trusts signed up
- 2,025 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”*

You can read the full report here: <http://bit.ly/OxfordAHSNsurvey>

Highlight PPIEE



leadingtogether@oxfordahsn.org

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 Clinical Networks



“The Thames Valley Neonatal Network is delighted to see that there has been a dramatic reduction in preterm babies being born outside a tertiary centre. This is a major achievement in a short space of time and the whole network is to be congratulated on all the hard work and co-operation that has gone into making this project a success.”

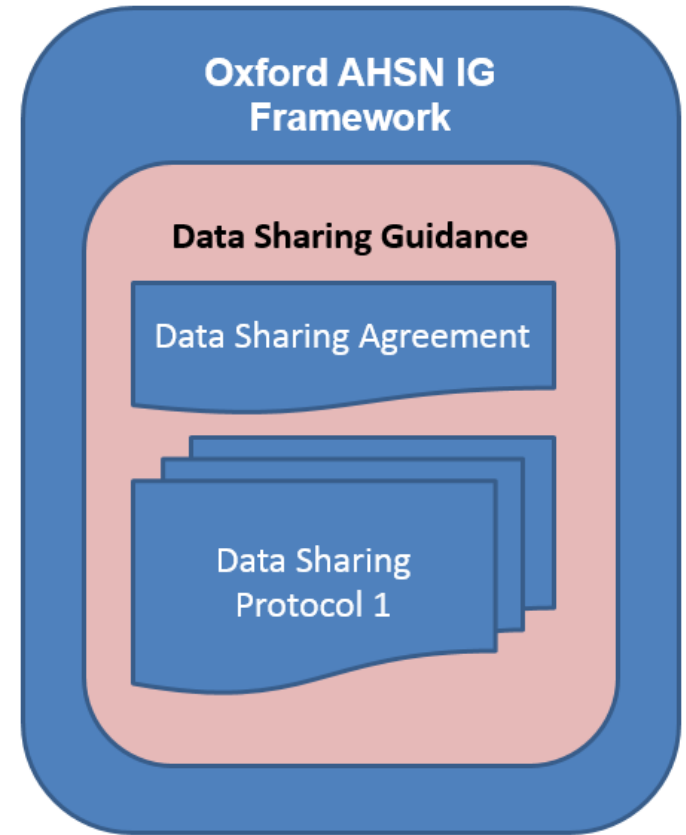
Dr Eleri Adams, Vice Chair, National Neonatal Clinical Reference Group; Clinical Lead, Thames Valley Neonatal Network

Highlight Clinical Networks



“....with great support from the AHSN three members of our team attended the YPWD course that was run by Berkshire in September and they are really motivated and really excited to start bringing an equivalent type of service to Milton Keynes. We’ve got a lot to aspire to because Berkshire has got an absolutely fantastic service running – it’s a brilliant role model for us and our staff are really keen to take that forward.’ Dr Stephanie Oldroyd, Consultant Clinical Psychologist, Milton Keynes Memory Service, CNWL FT

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

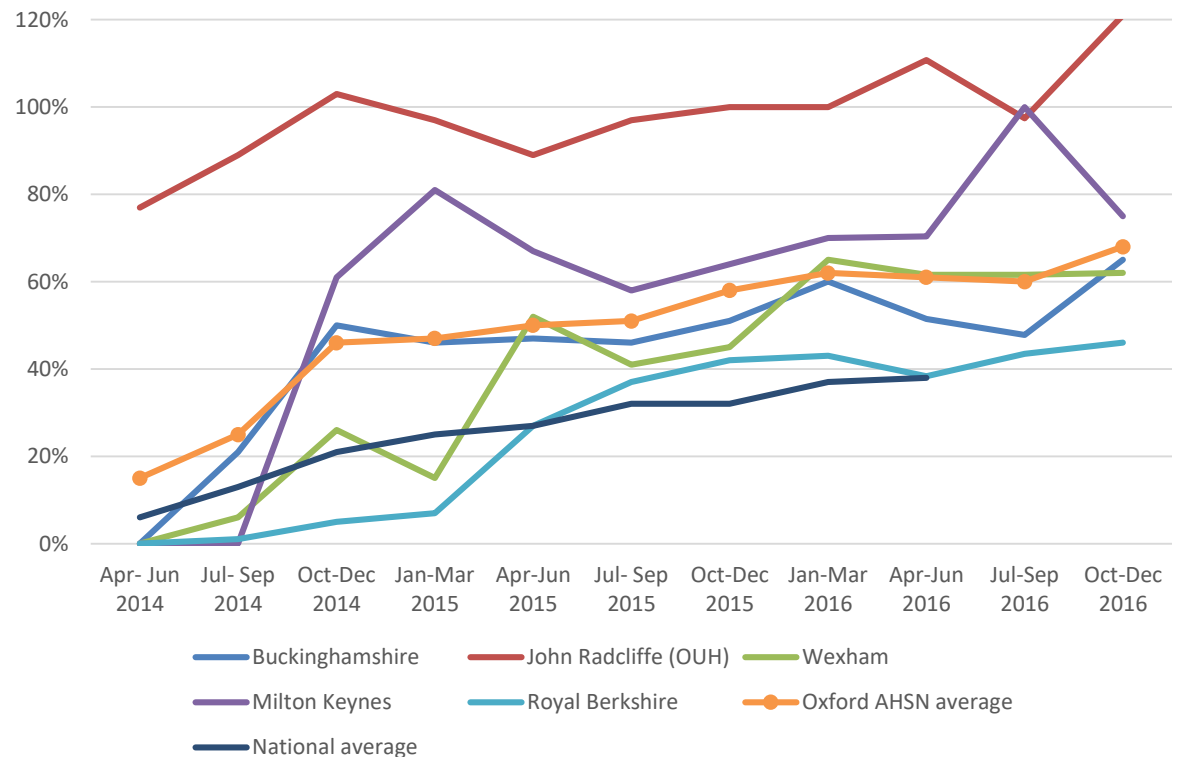
Clinical Area	Medicines	Medical Devices	Digital Health	Diagnostics
Stroke	<ul style="list-style-type: none"> NOACs 	<ul style="list-style-type: none"> Intermittent Pneumatics Compression Sleeves 		<ul style="list-style-type: none"> Point of care
Diabetes			<ul style="list-style-type: none"> Gestational Diabetes Monitoring 	
Sepsis				<ul style="list-style-type: none"> Curetis Unyvero™ system
Safety		<ul style="list-style-type: none"> Pneux Wiresafe Non-injectable connectors 	<ul style="list-style-type: none"> Intelligent Ultrasound 	
Respiratory				<ul style="list-style-type: none"> Circassia NIOX® FeNo Point of Care (PoC)
Patient mobility		<ul style="list-style-type: none"> Gyroset 		
Ambulatory care			<ul style="list-style-type: none"> ISanSys patient monitoring 	
Prevention				<ul style="list-style-type: none"> Somascan

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.

% IPC Sleeve utilisation in the immobile patient cohort



Examples of innovation – latest projects to improve patient safety

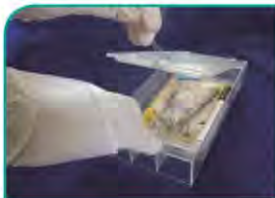
- Read more in our Patient Safety annual report – copies available here today

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.

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

HORIBA



- Evaluation of Horiba Microsemi^{CRP*} 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

In
Planning



- 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

 **curetis**



- 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

Impact



47,000

Patients recovered
or avoided harm



200

Lives saved



£31m

New investment and savings
brought into the economy



Return = **2.5** times the
cost of the Oxford AHSN



100s

of projects



2,500

networked clinicians



300+

innovations assessed



33

innovations implemented across
medicines, devices, digital and diagnostics



2,500

people attended events organised
by or sponsored by Oxford AHSN

Examples of projects you are leading/involved with:

Programme	Example
Best Care	Pilot at MKUH offered children flu vaccine in outpatients
Clinical Innovation Adoption	Innovation course for healthcare staff MK and AHSN have reviewed heart failure care pathway IOFM in place at MK
Industry Partnerships	GDiabetes m-health monitoring now being developed by Drayson Technologies – MKUH engaged in this project
Patient Safety	CNWL have launched the AWOL project in Milton Keynes and London MK has provided data sets for AKI work

Future

- Innovations need to get into the NHS more rapidly and provide better value
- The AAR identified AHSNs as playing a key role in identifying and adopting new transformative products
- NHSE consider AHSNs are "*critical connective tissue*"
- Innovation: 6 thematic areas
 - Economy and growth
 - Genomics and personalised medicine
 - Diagnostics and Artificial Intelligence
 - Medicines, Medtech, Diagnostics uptake & optimisation
 - Research
 - Innovation Capability Building and Brokerage
- Improvement:
 - Localised & bespoke
 - STP/regionally commissioned



Accelerated Access Review: Final Report

Review of innovative medicines and medical technologies
An independently chaired report, supported by the Wellcome Trust



Dr Stephanie Oldroyd

Consultant Clinical Psychologist at the Specialist
Memory Service

Lead Clinical Psychologist for Mental Health

Milton Keynes Mental Health Services

Central and North West London

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Specialist Memory Service

- Memory Assessment Service commissioned in 2011
- Merged with the Community Dementia Service in 2015
- 1 team, 2 functions, 20 Staff
- Psychology led model-Diagnosis on the day
- Post diagnostic support
- Pharmacological interventions
- Treatment and support for BPSD
- Close work with commissioners to improve pathway

Involvement with the AHSN 16-17

- Dementia Advisory Group
- Care Home In Reach project
- Post Diagnostic Best Practice network
- Accreditation
- CPD events
- YPWD

YPWD

- Berkshire project
- www.ypwd.info
- Investment in training
 - 3 staff for 2 days
 - Knowledge and understanding
 - How to set up and run a workshop for YPWD
 - Follow up days
- Our first steps
 - Walking group “Step Forward”
- Funding from the AHSN
 - Investment in our project



STEP FORWARD

Younger People with Dementia Activity Group

Step Forward is a six week walk and talk group, designed to begin the process of finding out what people diagnosed with dementia under the age of 65 want for better Younger People with Dementia Services (YPWD) in Milton Keynes.

Accessible to all levels of walkers, families, friends and volunteers, each session will take place at different venues in the community.

You will need to attend a registration session on Thursday 10th November at The Specialist Memory Service, Cripps Lodge MK6 4JJ at 10.30am. If you'd like to register your interest or find out more please contact Sheila Quill on 01908 252 978 or call 01908 254322, or email sheila.quill@nhs.net.



YPWD-MK.....our aspirations

Offer hope, support and enjoyable and stimulating activity, for those younger people affected by dementia

- 5 staff committing to a one year project
- Newsletter for contacting the surgeries
- 3 “People gathering” events
- Develop new groups
- Build interest – young approach to life
 - Fund raise and start a charity?
 - Create a new network in MK
- Become commissioned!

YOND-MK

network of all affected by
Young Onset Dementia in Milton Keynes

Biggest thanks to the AHSN for their support to
our service and service users

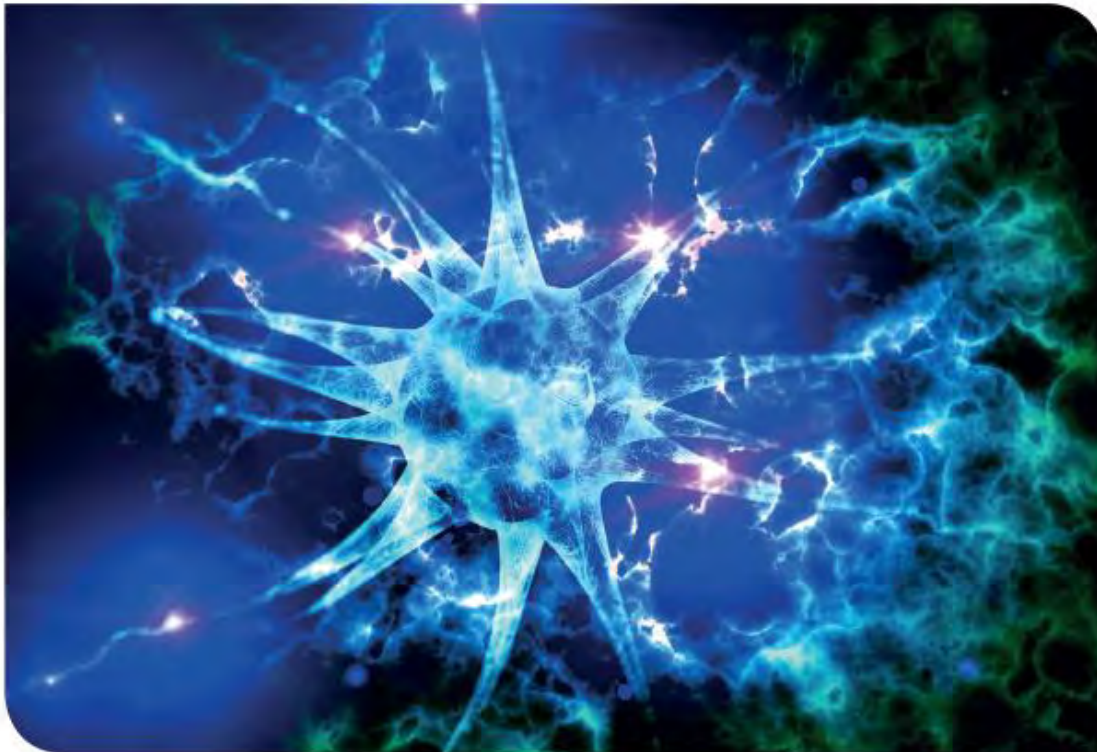
If you are interested in supporting YPWD-MK
with time or money please contact me or the
team at miltonkeynes.sms@nhs.net

Learning and innovation

Alex Quinn – my personal experience of the
Healthcare Innovators Course

Oxford Academic Health Science Network
and Buckinghamshire New University:
The Innovating in Health Care Settings
Programme 2016/17

Oxford 
Academic Health
Science Network



Many of us working within the NHS have an idea or know of existing innovations that have the potential to transform our services however, there are often considerable challenges to implementation.

Experience and expertise within the Oxford AHSN has highlighted some of the key barriers – such as the role of evidence as proof of effectiveness, the support needed for innovators both inside and outside their organisation and the importance of gaining support from their executive team as well as senior management and clinical colleagues.

The key objective of this course is to make the route through to ‘successful implementation of innovation’ clearer, and to develop participant’s knowledge and skills so that they can deliver with confidence.

Tracey Marriott – Director of Clinical Innovation Adoption

The Programme Content

Module 1: What is Innovation and how do we adopt it?

Module 2: Delivering Innovation

Key topics delivered in these modules include:

- Defining and distinguishing clinical innovations and service redesign (developing theoretical analytical skills)
- Understanding processes of change management and spread of innovation using validated change management models (people management)
- Using systematic tools to diagnose opportunities and obstacles to innovation (developing systematic approaches to assessing readiness for innovation adoption)
- Using the PDSA cycle to systematically implement and monitor innovation deployment
- Using run and control charts to understand/interpret variation and monitor impact of innovation (using local data to inform decision making and effectiveness)
- Assimilating innovation into practice (what is and is not working and why)
- Project management (using a systematic approach to project management including timelines and setting, meeting and modifying objectives).

Future Programmes

The next programme is scheduled to start at Buckinghamshire New University in September 2017.

Any colleagues interested in joining the next cohort of the programme can find out more information by contacting:

lauren.davis@oxfordahsn.org or by visiting
<http://bit.ly/2pywgzu>

Intraoperative Fluid Management

Driving the relevant adoption of Intraoperative Fluid Management (IOFM) technology across the Oxford AHSN region

Dr Venkat Hariharan, Consultant Anaesthetist,
Milton Keynes University Hospital

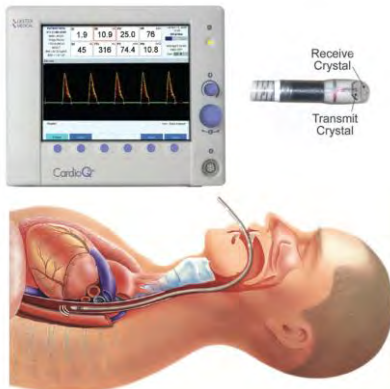
Venkat.hariharan@mkuh.nhs.uk

Intraoperative Fluid Management

What is IOFM?

- The use of Intraoperative Fluid Management (IOFM) Technology enables an anesthetist to monitor and manage a patient's hydration status during major and high-risk surgery.
- There is a strong body of evidence which shows that the use of this technology can facilitate improved outcomes for patients

Multiple Technology Options



Deltex - CardioQ



Cheetah - NICOM Monitoring



Lidco - Lidco Rapid

Intraoperative Fluid Management
Phase I of IOFM Project

Understanding IOFM usage across the region

- Milton Keynes Hospital engaged very early on in Oxford AHSN project
- **Project engaged 138 anesthetists across the region** to understand barriers to clinical adoption
- Project also engaged trust managers, main suppliers of IOFM technology, regional CCGs and NHS England to further understand organizational issues around adoption
- Project team identified a number of areas in which work is required in order to support further adoption of IOFM
- Findings were communicated in a published report http://www.oxfordahsn.org/wp-content/uploads/2015/10/12508_Oxford_AHSN_IOFM_36-page_Report-005.pdf



Intraoperative Fluid Management
Anaesthetic Guidelines

**Anaesthetic Guidelines for
Colorectal Enhanced Recovery Cases**

Intra operative :

- Antimicrobial prophylaxis within 60 minutes of skin incision
- Local anaesthesia techniques recommended
 - For laparoscopic cases with low risk of conversion single shot spinal anaesthesia with Diamorphine is advisable
 - For laparoscopic cases with high risk of conversion such as previous surgery and scars epidural may be considered
 - Tap block may be considered.
- Avoid nasogastric tube
- IV fluids and blood pressure management
 - o Restrict crystalloid maintenance to 5ml/kg/hr
 - o Equivolume colloid in the event of excessive bleeding
 - o Use vasopressors in preference to more fluid to maintain BP
 - o Non invasive cardiac output monitoring for all ERP cases and document the baseline values and the subsequent values in the anaesthetic chart and fill the log sheet attached to the monitor

Intraoperative Fluid Management
Phase I Key points from Milton Keynes

IOFM Equipment at MK at time of survey

- 8 IOFM CO Monitors in total
 - 2 CardioQ-ODM
 - 3 Lidco Monitors
 - 3 Cheetah Nicom Monitors
- AHSN recently match funded MK to purchase addition CardioQ-ODM+
- Current number of machines considered enough to cover demand



IOFM Usage at time of survey

- ODM and Lidco used peri-operatively and post-operatively in ICU
- IOFM used by Consultant; Trust doctor, Registrars/ Trainees alike
- Surgery types
 - Laparotomies – Usually use IOFM
 - Major Elective colorectal - Usually use IOFM



“We have good experience of it [IOFM] in elective colorectal surgeries and we are extending its use in emergency laparotomies. Currently we do not realise the need for it in other areas”

IOFM Recording at time of survey

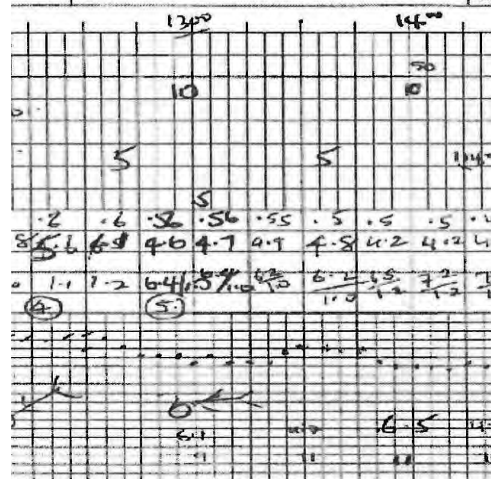
- IOFM is being recorded for all procedures in which it is used
- Recorded on paper based system
- Not currently being coded using Y73.6 OPCS code



Source: NHS Benchmarking Trust Survey 2015 based on response from Milton Keynes Hospital

IOFM Recording

<input checked="" type="checkbox"/> Machine Check	<input checked="" type="checkbox"/> WHO Check
<input checked="" type="checkbox"/> NIBP	<input checked="" type="checkbox"/> ECG
<input checked="" type="checkbox"/> FI02	<input checked="" type="checkbox"/> ETC02
<input checked="" type="checkbox"/> ET Agent	<input checked="" type="checkbox"/> SP02
<input type="checkbox"/> TEMP	<input type="checkbox"/> Nico



Currently..... How IOFM use is documented

04-Jul-16	20-Jul-16	H33.1	Abdominoperineal excision of rectum and end colostomy
		Y73.6	Intraoperative fluid monitoring
27-Jul-16	28-Jul-16	N24.2	Operations on skin of male perineum NEC
		Y73.6	Intraoperative fluid monitoring
14-Aug-16	17-Aug-16	B30.3	Removal of prosthesis for breast
		Y73.6	Intraoperative fluid monitoring
22-Aug-16	23-Aug-16	S57.1	Debridement of skin (foot)
		Y73.6	Intraoperative fluid monitoring
25-Aug-16	25-Aug-16	W24.2	Closed reduction of fracture of long bone and rigid internal fixation NEC
		Y73.6	Intraoperative fluid monitoring
28-Aug-16	08-Sep-16	T41.3	Freeing of adhesions of peritoneum
		Y73.6	Intraoperative fluid monitoring
12-Sep-16	12-Sep-16	Q41.3	Dye test of fallopian tube
		Y73.6	Intraoperative fluid monitoring
12-Sep-16	12-Sep-16	Q20.2	Biopsy of lesion of uterus NEC
		Y73.6	Intraoperative fluid monitoring

Phase II Project

Project goal To increase the *relevant* adoption of IOFM technology in the Oxford AHSN region

Key Project Workstreams

<ul style="list-style-type: none">• Improve recording, reporting and coding of IOFM
<ul style="list-style-type: none">• Agree shortlist of procedures and patients in which IOFM should be used
<ul style="list-style-type: none">• Support in training and awareness programs focussed on IOFM usage in clinical scenarios where it is likely to be of real benefit

Partners Engaged in Phase II

- **Milton Keynes**
- Royal Berks
- Bucks Healthcare
- Wexham Park
- Great Western

Clinical Leadership

Project Clinical Lead:

Dr Emmanuel Umerah, Frimley Health

Local Clinical Lead

Dr Hariharan Venkat

Intraoperative Fluid Management Phase II Project Structure

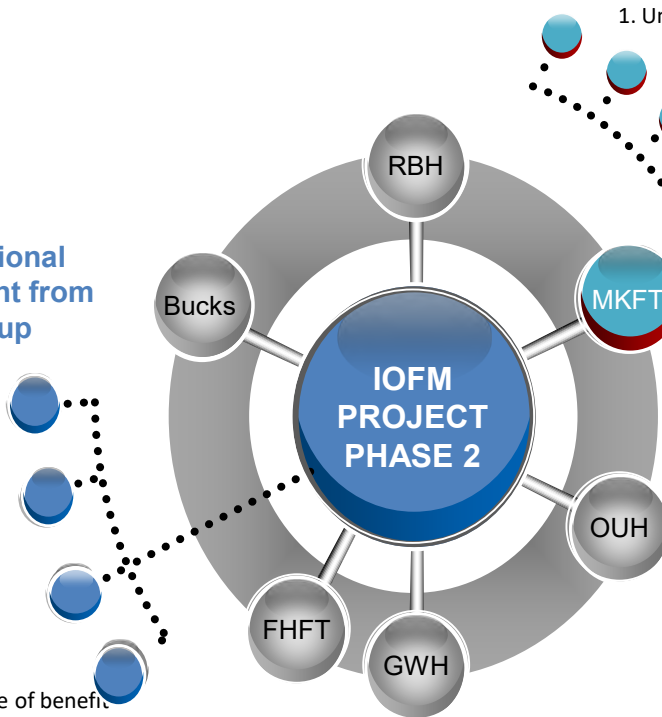
**Activities below will be regional
and will require engagement from
site leads and steering group**

1. Review Evidence

2. Develop appropriate metrics

3. Engage CCGs, NHSE to explore
opportunities in policy

4. Develop economic evidence of benefit
based on real word data



1. Understand barriers to recording

2. Collect baseline data

3. Set local targets for improving usage

4. Audit training and education

5. Support business case development













6. Develop and roll out training program with suppliers
and clinical advocates

7. Measure and monitor

**Activities above have been locally delivered by
project team at MKFT**

Intraoperative Fluid Management

Proposed surgeries in which Phase II will focus driving IOFM adoption

		ASA I	ASA II	ASA III
G, H and T codes	Emergency Laparotomy			
G, H and T codes	Major Elective Colorectal Surgery			
W codes	Hip Revision Surgery			
B and L codes	Free Flap Surgery			

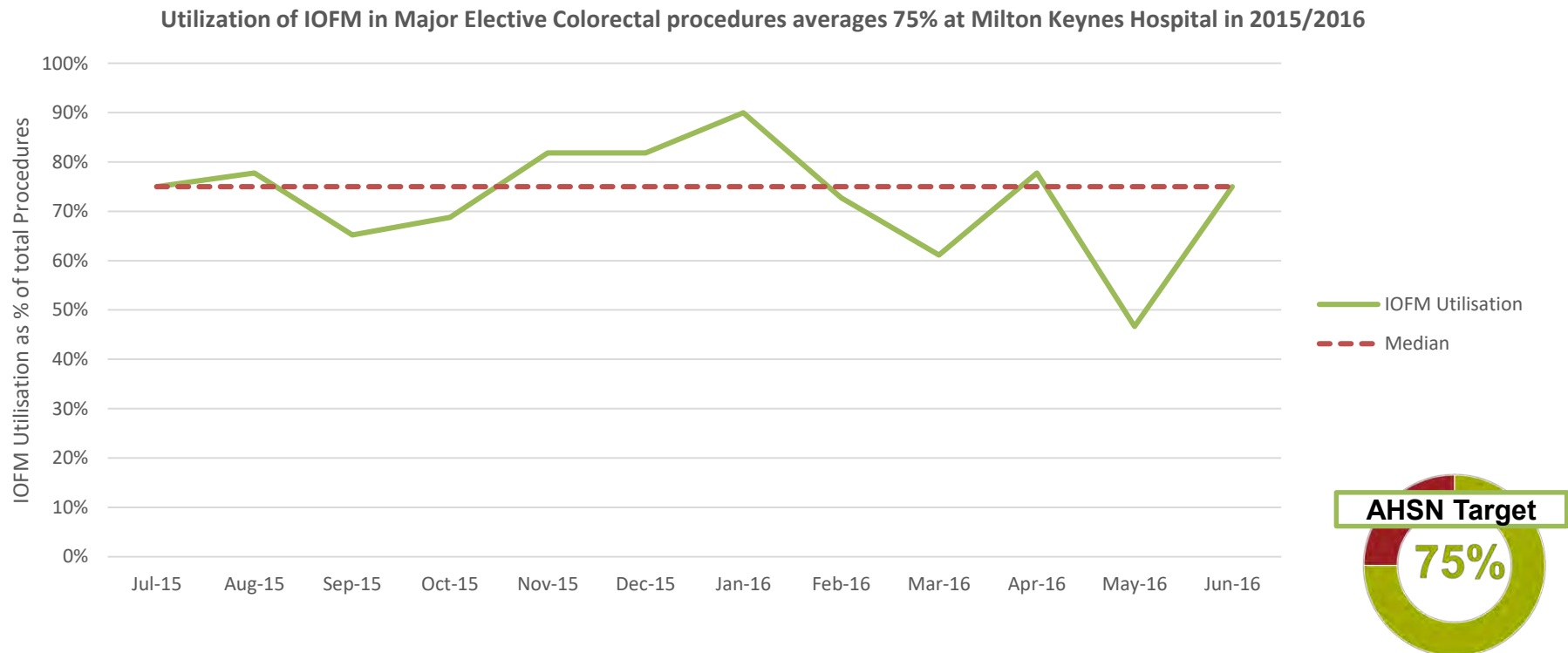
Anesthetists engaged agree that IOFM should be used in most cases of the surgeries to right

Oxford AHSN is supporting partners to reach an adoption target of 75%



Elective Colorectal Surgery

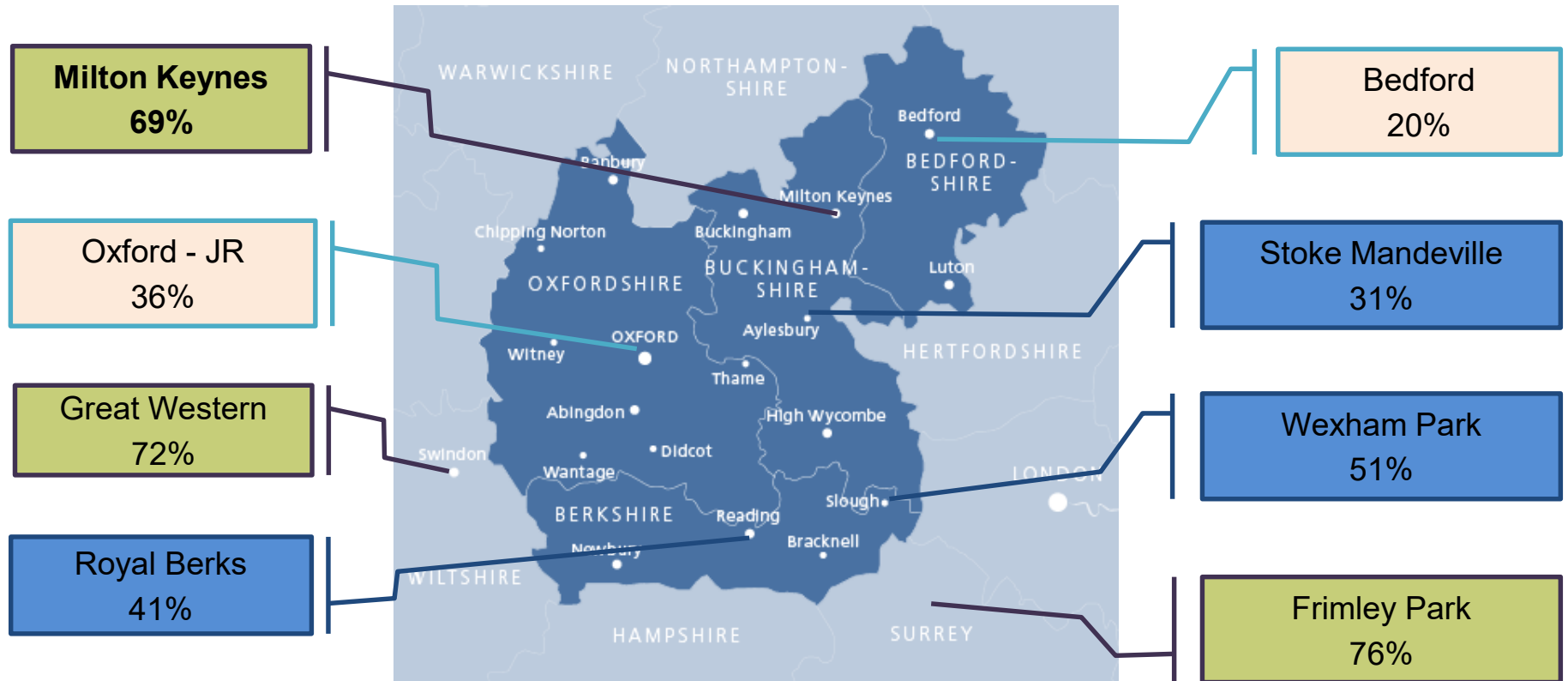
Utilization of IOFM in Major Elective Colorectal procedures averages 75%



Source: Audit N7022 – APC_General; APC_Procedures

Emergency Laparotomies

2014/2015 NELA Data suggests wide variation in use across the region

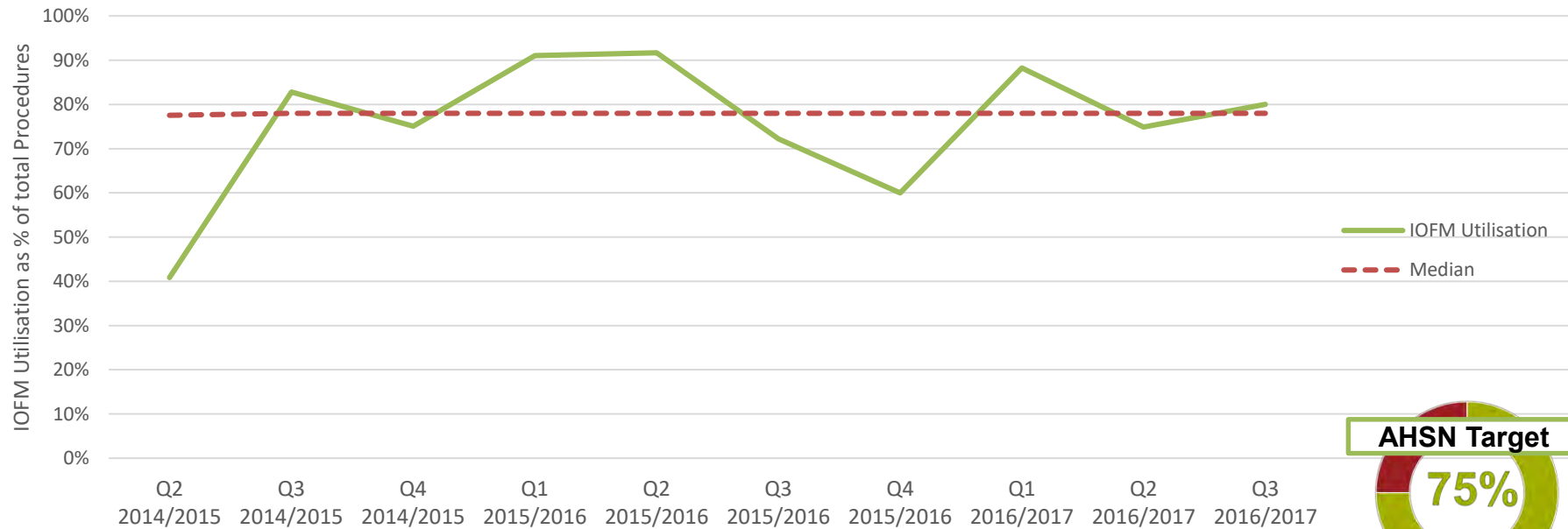


Sources: Local NELA data accessed through NELA data portal and NELA Audit Data – First NELA Audit Clinician Report

Emergency Laparotomies

Utilization of IOFM in Emergency Laparotomy (NELA) cases has averaged at 78%

Utilization of IOFM in NELA cases at Milton Keynes Hospital over course of AHSN IOFM project



Source: Audit N7022 – APC_General; APC_Procedures

Where the AHSN have added value to local practice

Providing project
frameworks for innovation
adoption

Supporting development of
internal business cases for
further procurement of
equipment

Drawing attention to
regional variation in
services and patient
outcomes

Improving post
operative
outcomes in
high risk
surgery across
the region

For more Info contact

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