## **KQuIP/UKRR Regional Day East Midlands**

12th September 2017

**IGEM House, Kegworth, Derbyshire** 

09:30 - 16:45





## **KQuIP/UKRR Regional Day East Midlands**

09:30 - 09:50

Introduction from Network Clinical Lead and Co-Chair of KQuIP

- Networking in East Midlands Simon Roe, Clinical Lead
- KQuIP and the NHS Change Model Graham Lipkin, Chair of KQuIP







# KQuIP/UKRR Regional Day – East Midlands 2017

Introduction and Welcome
Dr Simon Roe
Clinical Director for Cardiovascular Disease, East Midlands CN



#### East Midlands Clinical Networks

## Hopes and ambitions for the day

- Opportunity for networking between colleagues
- Better understand the role of KQuIP and the national improvement projects
- What does the UKRR data tell us about renal care in the East Midlands?
- Mixture of talks and breakout sessions
- What is the vision for Renal QI in the East Midlands?
- Enjoy the day

# East Midlands Clinical Networks – What down we do?

- Cardiovascular, Cancer, Mental Health, Maternity services
- CVD
  - Diabetes: NDPP and treatment targets
  - Stroke prevention in AF; heart failure management
  - Clinical advisory groups: stroke, renal, diabetes, cardiac services, vascular

NHS DIABETES PREVENTION PROGRAMME

- Urgent and emergency care leads for vascular and cardiac
- Renal: Supporting work around AKI and CKD; Transplant
   Improvement Group

## East Midlands Clinical Networks

## East Midlands Clinical Networks – the future....

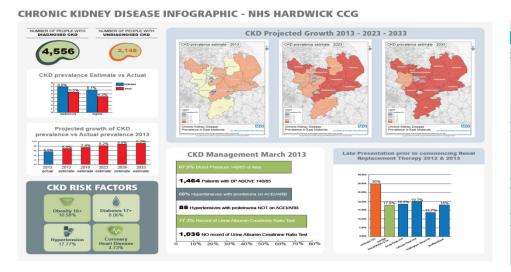
- Operating in a VUGA environment!
- Current consultation on role and structures
  - Potential to realign geographical boundaries
  - CVD network focus entirely on diabetes
- Nothing will change before April 2018





## Renal Pathway Infographic

- Plan to develop infographic following event to bring together data across the renal pathway
- Include data from UKRR 2015 & QOF March 2017





### **Kidney Quality Improvement** Partnership (KQuIP)

### **East Midlands Network KQuIP/UK Renal Registry Day**

**Graham Lipkin** Co-chair of KQuIP



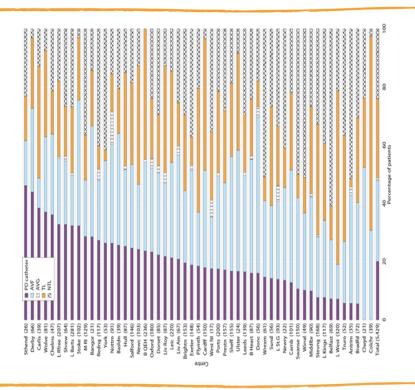
### **East Midlands Network KQuIP/Registry Day**

#### **Aims**

- **Know your outcomes-data**
- Identify your Unit QI leads: Medic and MPT
- **Decide on your Unit Key priority**
- Feel supported to embed QI in your practice
- Sign up to KQuIP

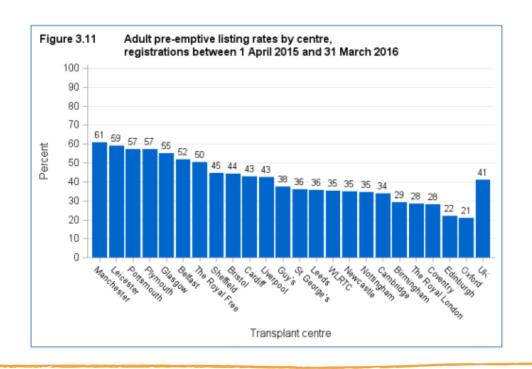
#### **Access at Initiation of Dialysis**





#### **Pre-emptive Transplantation Listing Rates**

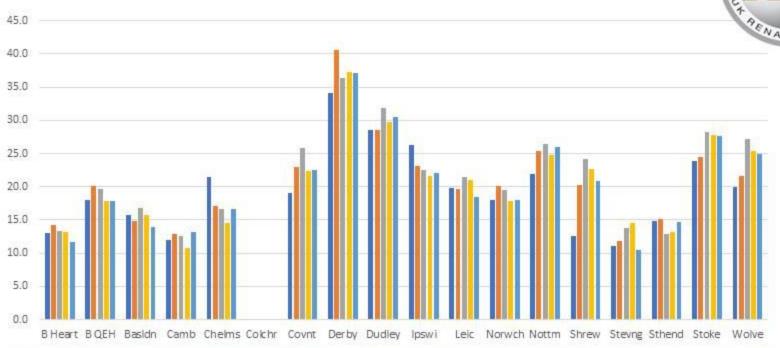






#### Home Dialysis: UK Renal Registry-Do we improve?







#### Why does unwarranted variation persist?

#### Many reasons:

> Specific to each Unit-solutions can only come from those on the front line-you know your system best

#### Some systematic

- Resource?
- Leadership & leadership training
- Training in QI methodology
- Structure
- We don't share good practice (or learn from less good practice)



# KQuIP Launched 2016 THINK KIDNEYS









Measurement and Understanding



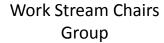
Projects







**Programme Board** 







Faculty

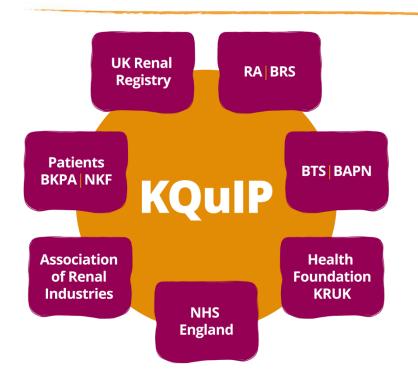
CTHINK KIDNEYS







#### **Kidney Quality Improvement Partnership (KQuIP)**



KQuIP is a dynamic network of kidney health professionals, patients carers and industry ...committed to developing, supporting and sharing quality improvement in kidney services.... in order to enhance outcomes and quality of life for patients with kidney disease.

**Professional Society Led** Multi-Professional UK **Adults and Children's Care** 





#### **How Will KQUIP Support Quality Improvement?**

- 1. Regional QI Days
- 2. 3 National Priority Projects
- 3. KQuIP Hub
- 4. Project Management Support



#### **3 National KQuIP Priority Projects**

- Improving access to kidney transplantation; Transplant First

  Transplant First, developed in West Mids under KQuIP. Nowpackaged.
- Improving access to home therapies for suitable patients

  Launch Manchester Dialysis Conference

#### **KQuIP Support - Post Regional Network**



Central Project management through Registry

Individual Projects Management Support

Registry metrics, training, peer assist, KQuIP Hub



#### Training in Leadership & QI Methods-Medical and MDT



"In order to practise medicine in the 21st century, a core understanding of quality improvement is as important as our understanding of anatomy, physiology and biochemistry"

Stephen Powis, Medical Director, Royal Free London NHS Foundation Trust, 2015



#### **KQuIP – How will it support Renal Quality Improvement?**

#### National

- Advice to Clinical Reference Group.
- Central Registry Project management & faculty
- Online KQuIP Hub repository
- Industry coordination
- Regional supporting Renal Clinical Networks
  - Renal Registry/KQuIP quality improvement day
  - Regional Project management support
  - Peer assist



# **KQuIP - National Meetings** 2017-18

**Renal Association** 

19 – 21st June Liverpool





#### UKKW2018 UK Kidney Week 2018

19th – 21st June 2018 Harrogate Convention Centre

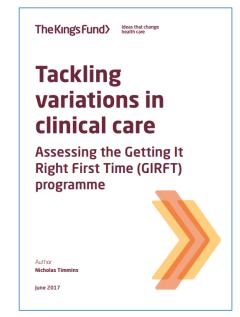
UKKW2018 is a multi-disciplinary event co-organised by





## Enabling Kidney Quality Improvement





### What we want you to do as day goes along

- Select Priority project (s)
- Identify Quality Leads in each Renal **Unit Medical & MPT**
- Sign up to KQuIP



#### KQuIP welcomes you...

#### ...enabling you and your team to improve quality and safety



Home About Case studies Latest Resources Events Forum Q

#### Kidney Quality Improvement Partnership

Working together to develop, support and share improvement in kidney services to improve people's health and add value









www.thinkkidneys.nhs.uk/kquip/

#### What is KQuIP?

KQuIP is a dynamic network of kidney health professionals, patients and carers who are committed to developing, supporting and sharing quality improvement in kidney services in order to enhance outcomes and quality of life for patients with kidney disease.

#### What does KQuIP do?

KQUIP will improve the lives of adults and children affected by kidney disease by supporting healthcare professionals, kidney units, renal networks and commissioners across the UK to achieve the highest quality of care for patients.



## **Enjoy the Day**



## **KQuIP/UKRR Regional Day East Midlands**

09:50 - 11:00

What do the data tell us - primary, secondary and tertiary care

NHS Rightcare and the National Cardiovascular Intelligence Network (NCVIN) – Using primary care data sources to improve kidney care Followed by Q & A

James Medcalf and James Hollinshead, Public Health England







# Using primary care data sources to improve kidney care

James Hollinshead & James Medcalf National Cardio-Vascular Intelligence Network (NCVIN) 12 September 2017



# Using primary care data sources to improve kidney care

James Hollinshead & James Medcalf National Cardio-Vascular Intelligence Network (NCVIN) 12 September 2017



27% of all deaths caused by cardiovascular disease

premature deaths caused by cardiovascular disease

cardiovascular disease costs the NHS

£6.8 billion

a year



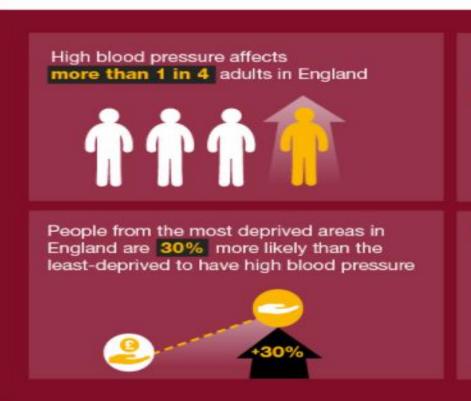




#### Cardiovascular Disease Prevention: Risk Detection and Management in Primary Care

Cross Cutting: 1. NHS Health Check systematic detection of high BP, AF, NDH, T2DM, CKD, high cholesterol, CVD risk 2. System level action to support guideline implementation by clinicians 3. Support for patient activation, individual behaviour change and self management The Interventions Detection, CVD risk Type 2 Diabetes High BP detection AF detection and Diabetes detection CKD detection assessment. preventive and treatment anticoagulation and management and treatment intervention treatment 5 million un-30% undiagnosed. 85% of FH 5 million undiagnosed. 940k undiagnosed. 1.2m undiagnosed. The undiagnosed & most diagnosed - 40% Over half untreated Most do not receive 40% do not receive Many have poor BP people at high CVD risk **Opportunities** poorly controlled or poorly controlled intervention all 8 care processes & proteinuria control do not receive statins Control of BP, HbA1c Control of BP, CVD BP lowering Anticoagulation Behaviour change Intensive behaviour The Evidence prevents 2/3 of change (eg NHS DPP) and lipids improves risk and proteinuria prevents strokes and statins reduce and heart attacks strokes in AF life time risk of CVD reduces T2DM risk 30-60% CVD outcomes improves outcomes Blood High CVD risk & NDH Type 1 and 2 **Chronic Kidney** The Risk **Atrial** Diabetes **Pressure Fibrillation** Familial H/cholesterol ('pre-diabetes') **Disease** Condition Detection and 2°/3° Prevention 50% of all strokes & 5-fold increase in Marked increase in Marked increase in Marked increase heart Increase in CVD, acute Type 2 DM and CVD kidney injury & renal heart attacks, plus strokes, often of premature death and attack, stroke, kidney, **Outcomes** replacement CKD & dementia greater severity disability from CVD at an earlier age eve, nerve damage



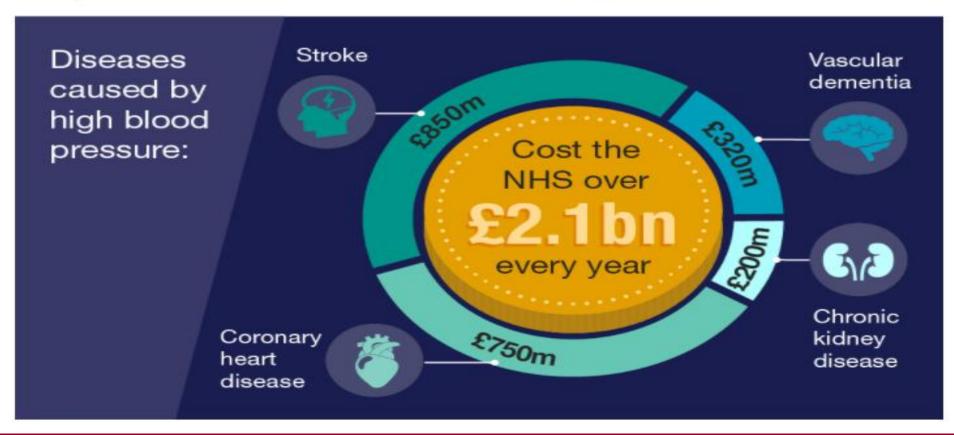


High blood pressure is the 3rd biggest risk factor for premature death and disability in England after smoking and poor diet



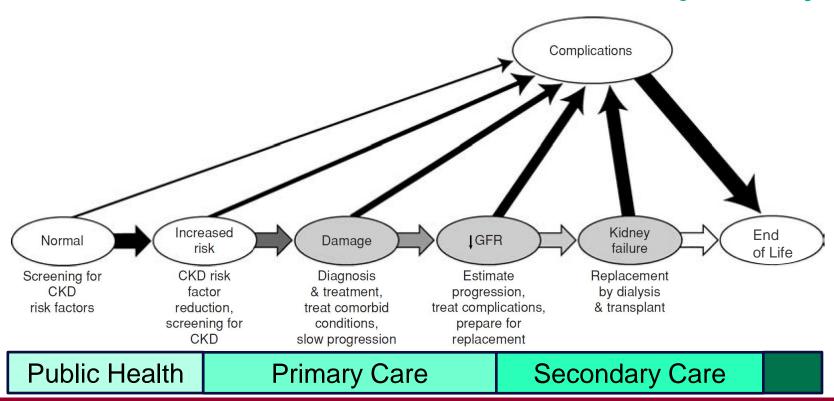
At least half of all heart attacks and strokes are associated with high BP and it is a major risk factor for chronic kidney disease, heart failure and dementia



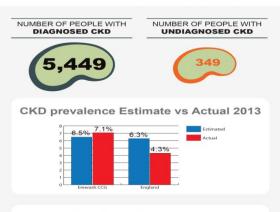


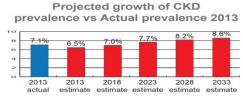


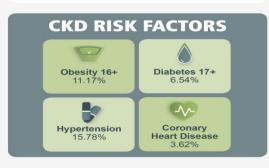
### Renal journey

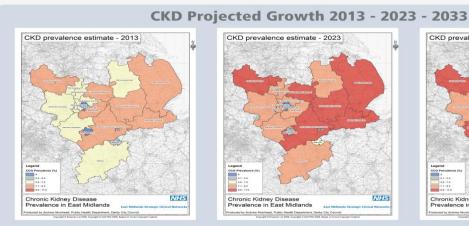


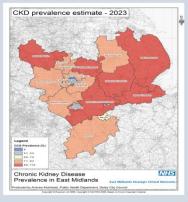


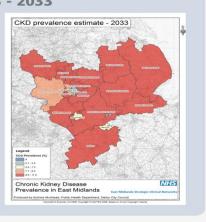




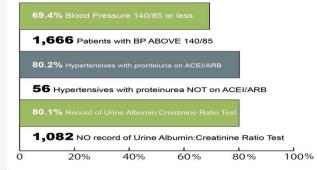


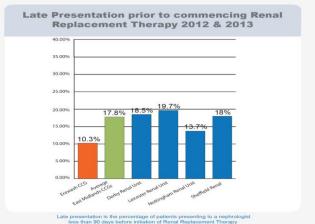






#### **CKD Management March 2013**



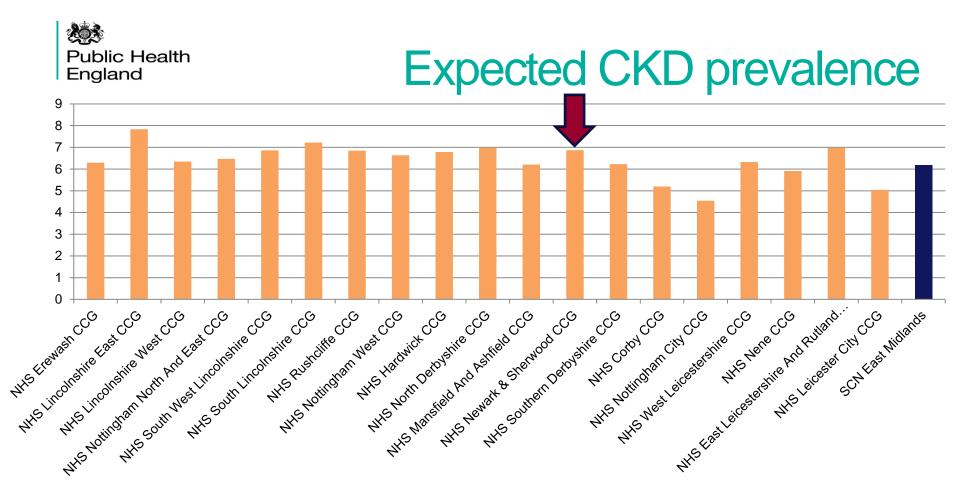




### How common is CKD?

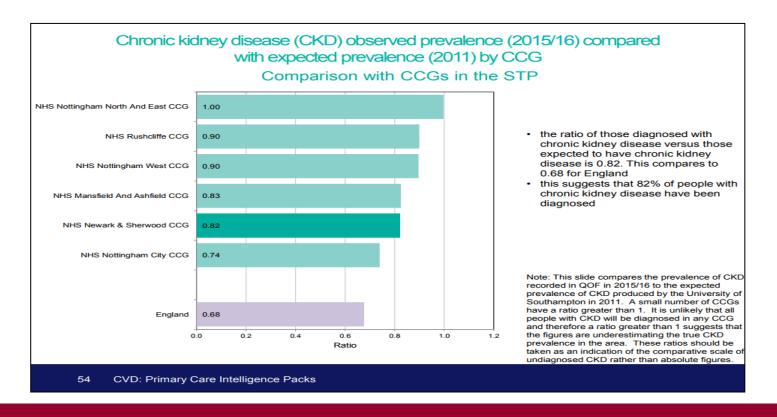
Number of patients with diagnosed CKD on GP registers, 2010/11 to 2015/16

Area	Year						% Change	Channa in number of
	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	% Change 2010/11 to 2015/16	Change in number of people on register 2010/11 to 2015/16
Derbyshire STP	44,250	44,610	44,070	37,593	42,727	45,423	2.7	1,173
Leicester, Leicestershire and Rutland STP	31,748	31,713	32,436	30,728	31,965	32,150	1.3	402
Lincolnshire STP	40,770	38,926	38,921	35,430	41,191	44,441	9.0	3,671
Northamptonshire STP	23,570	23,753	23,267	20,501	22,566	22,757	-3.4	-813
Nottinghamshire STP	44,106	44,909	46,549	40,087	43,190	42,088	-4.6	-2,018
East Midlands Region	184,444	183,911	185,243	164,339	181,639	186,859	1.3	2,415
England	1,854,727	1,873,605	1,881,631	1,786,463	1,859,963	1,872,808	1.0	18,081



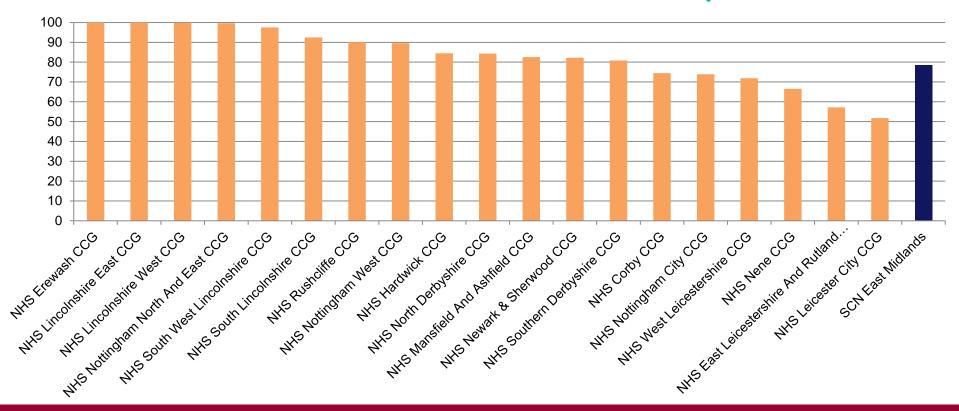


## Public Health England CKD observed to expected prevalence ratio





### CKD observed to expected ratio





### Proportion BP <= 140/85

CKD002: Last BP reading measured in last 12mths is <=140/85 (den. incl. exc.) - retired

2014/15

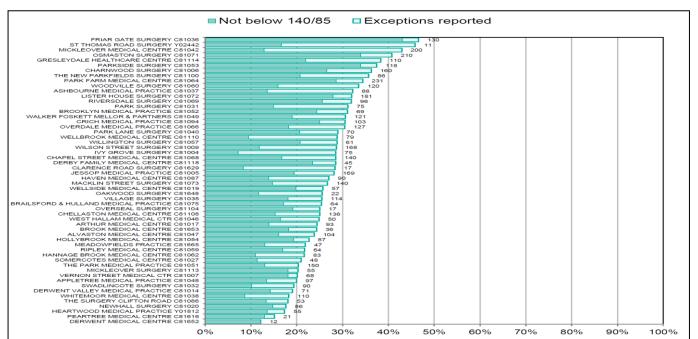
Proportion - %

Area	Count	Value		95% Lower Cl	95% Upper CI
England	1,384,184	74.4		74.4	74.5
SCN East Midlands	143,639	74.5		74.3	74.7
NHS Corby CCG	1,823	80.7	Н	79.0	82.2
NHS South Lincolnshire CC	436 5,908	77.4	Н	76.4	78.3
NHS Rushcliffe CCG	4,913	76.7	Н	75.6	77.7
NHS Nottingham West CCG	3,665	76.5	Н	75.3	77.7
NHS Lincolnshire West CCG	8,264	76.0	Н	75.2	76.8
NHS Nene CCG	15,328	75.5	H	74.9	76.1
NHS Lincolnshire East CCG	11,832	75.2	H	74.5	75.8
NHS Leicester City CCG	6,094	74.8	Н	73.9	75.8
NHS Mansfield And Ashfiel	152() 5,660	74.8	Н	73.8	75.8
NHS East Leicestershire A	7,720	74.3	Н	73.5	75.2
NHS West Leicestershire C	9,949	74.0	Н	73.3	74.7
NHS Nottingham North And	6,253	74.0	Н	73.0	74.9
NHS Erewash CCG	3,976	73.9	H	72.7	75.0
NHS South West Lincolnshi	5,125	73.9	Н	72.8	74.9
NHS Nottingham City CCG	7,565	73.7	Н	72.8	74.5
NHS Hardwick CCG	3,286	72.9	Н	71.6	74.2
NHS North Derbyshire CCG	10,096	72.9	H	72.2	73.7
NHS Southern Derbyshire C	<b>5100</b> (3,815)	72.7		72.1	73.4
NHS Newark & Sherwood CCG	J 100 4,125	/1.5	Н	70.3	72.6



# Is it just a few practices?

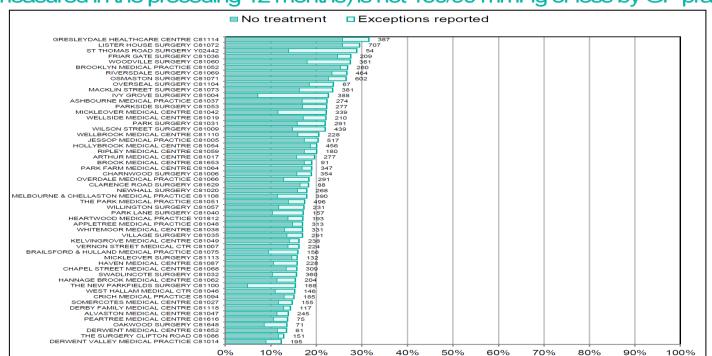
Percentage of patients on the CKD register whose last blood pressure reading (measured in the preceding 12 months) is not 140/85 mmHg or less by GP practice, 2014/15





# Is it BP treatment in general?

Percentage of patients with hypertension whose last blood pressure reading (measured in the preceding 12 months) is not 150/90 mmHg or less by GP practice



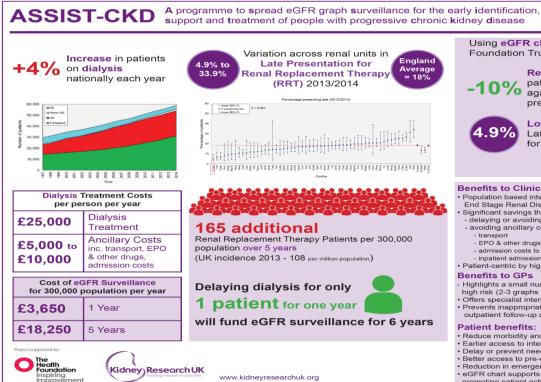


# Timely dialysis preparation

Proportion - %

Area	Count	Value	Lower CI	Upper CI
England	-	19	-	-
SCH Last Midlands	-	17	-	-
NHS Lincolnshire West CCG	-	31	-	-
NHS West Leicestershire C.,	-	26	-	-
NHS Hardwick 996	-	26	-	-
NHS Nene CCG	-	23	-	-
NHS Nottingham North And	-	23	-	-
NHS Newark & Sherwood CCG	-	22	-	-
NHS Mansfield And Ashfiel	-	20	-	-
NHS East Leicestershire A	-	19	-	-
NHS Southern Derbyshire C	-	15	-	-
NHS South Lincolnshire CC	-	15	-	-
NHS Nottingham City CCG	-	12	-	-
NH3 North Derbyshire CCS	-	9	-	-
NHS Leicester City CCG	-	7	-	-
NHS Lincolnshire East CCG	-	6	-	-
NHS Nottingham West CCG	-	0	-	-
NHS South West Lincolnshi	-	*	-	-
NHS Erewash CCG	-	*	-	-
NHS Rushcliffe CCG	-	*	-	-
NHS Corby CCG	-	*	-	-

Source: UK Renal Registry UKRR 2014



#### Using eGFR chart surveillance Heart of England Foundation Trust, Birmingham have delivered:

Reduction in -10% patients on dialysis against forecast prevalence level



Lowest Late Presentation for RRT nationally



#### **Benefits to Clinical Commissioning Groups**

- · Population based intervention supporting prevention & early detection of End Stage Renal Disease (ESRD)
- Significant savings through:
- delaying or avoiding dialysis treatment costs
- avoiding ancillary costs of dialysis including:
- transport
- EPO & other drugs
- admission costs to commence emergency dialysis
- inpatient admissions for complications related to dialysis treatment
- · Patient-centric by highlighting groups of patients at greatest risk of ESRD

#### Benefits to GPs

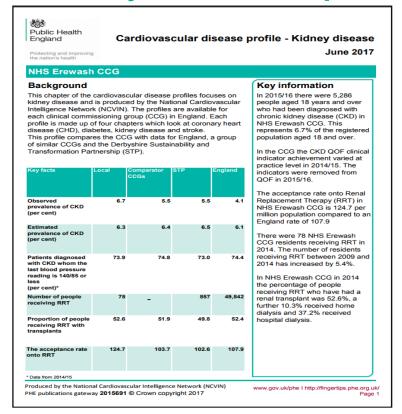
- Highlights a small number of people with progressive kidney disease who are high risk (2-3 graphs per month per GP practice)
- Offers specialist interpretation of long term trends of renal function
- · Prevents inappropriate referral of patients to nephrology & reduces need for outpatient follow-up of patients with stabilised renal function

#### Patient benefits:

- · Reduce morbidity and mortality and increase quality of life
- · Earlier access to interventions that slow down progression of kidney disease
- · Delay or prevent need for renal replacement therapy
- · Better access to pre-emptive transplantation & home therapies for dialysis
- · Reduction in emergency dialysis & inpatient length of stay
- · eGFR chart supports understanding of the decline in renal function promoting patient activation and empowerment in managing their disease



# Kidney disease profile





## Kidney disease profile

#### Kidney disease June 2017

#### NHS Nottingham North and East CCG

Julie 2017

#### End stage renal disease (ESRD)

This section summarises some indicators of service use and the care delivered to the CCG by kidney centres. The data is taken from the UK Renal Registry (UKRR), People within the CCG may attend different kidney centres and these and other indicators are available at kidney centre level from the UKRR website www.renalreg.com. Variability between these kidney centre indicators can reflect different patterns of service provision, for example, transplant centres or differences in the populations or the geographical areas served by the centres. Data should be interpreted with local knowledge in mind. Nationally the number of people receiving RRT continues to rise despite little change in the number of new people starting RRT. This is generally explained by a gradual national decline in mortality which is no different between centres once a disusted for case—mix.

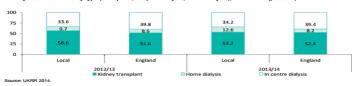
#### Provision of services 2014

	Local	Comparator CCGs	STP	England
Number of people receiving RRT, 2014	111	-	876	49,842
Change in number of people receiving RRT, 2009 to 2014 (per cent)	9.9	14.0	14.5	20.9
Proportion of dialysis patients receiving home dialysis (home HD and PD combined) (per cent), 2014	26.9	25.0	26.4	17.3

#### Proportion of people on RRT by treatment modality

Although a person's initial choice of the type of RRT is important – so is the availability of the range of treatment choices (including home therapies and renal transplantation) to those already receiving RRT. Supporting patients doing home therapies in particular is crucial if they are to continue with the treatment long-term. The proportions of people having each type of treatment, viewed alongside the proportions of people choosing each treatment initially gives an broad indication of ongoing access to choice, and also patient support to remain independent.

#### RRT by treatment modality type (transplant, hospital dialysis, home dialysis), 2012 - 2014 (per cent)

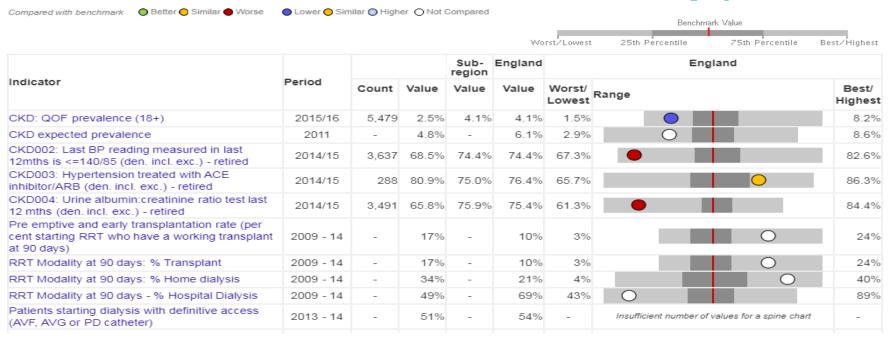


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www.gov.uk/phe | http://fingertips.phe.org.uk/



# Drilling down – is there a theme? Interactive kidney profiles

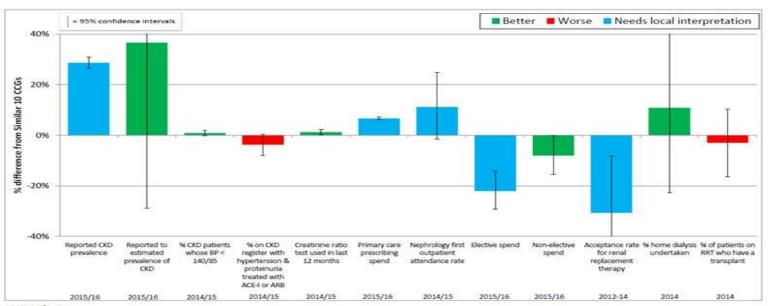




# NHS RightCare renal pathway

#### Renal pathway





NICE guidance:

http://pathways.nice.org.uk/pathways/chronic-kidney-disease http://pathways.nice.org.uk/pathways/acute-kidney-injury

35



# Any questions?

james.hollinshead@phe.gov.uk james.medcalf@nhs.net

# **KQuIP/UKRR Regional Day East Midlands**

09:50 - 11:00

What do the data tell us - primary, secondary and tertiary care

UKRR – The national and regional picture – To focus on areas of known variation

- Infection data and peritonitis
- Home therapies
- Mortality rates

Followed by Q and A

Fergus Caskey, Medical Director, UK Renal Registry







#### THE NATIONAL AND REGIONAL PICTURE

#### THE EAST MIDLANDS

**UK Renal Registry** 

#### **Dr Fergus Caskey**

Consultant Nephrologist, North Bristol NHS Trust Honorary Senior Lecturer, University of Bristol Medical Director, UK Renal Registry

#### What we will be covering

- Incidence (treatment rates)
  - Age and ethnicity
- Survival
  - Incident patients (from 90 days)
  - Prevalent patients
  - Impact of co-morbidity
- Quality of care
  - Attainment of CKD-MBD standards
  - Attainment of anaemia standards

- Vascular access
- Infections
  - PD peritonitis
  - MRSA & MSSA
- Home therapies
  - PD at day 1 and day 90
  - Home HD
- Late presentation
  - Modality

# **INCIDENCE (TREATMENT RATES)**



#### New RRT patients per million of the population

						Catchment		
_		`	Year			population	2015 rate	
Centre	2011	2012	2013	2014	2015	(millions)	pmp	(95% CI)
Derby	74	80	74	76	60	0.70	85	(64-107)
Leic	266	235	288	252	273	2.44	112	(99-125)
Nottm	114	100	113	111	129	1.09	119	(98-139)
						% change since 2011		
England	5,723	5,781	5,983	6,342	6,580	15.0		
UK	6,802	6,855	7,029	7,433	7,814	14.9		

Number of patients starting RRT by renal centre 2011-2015

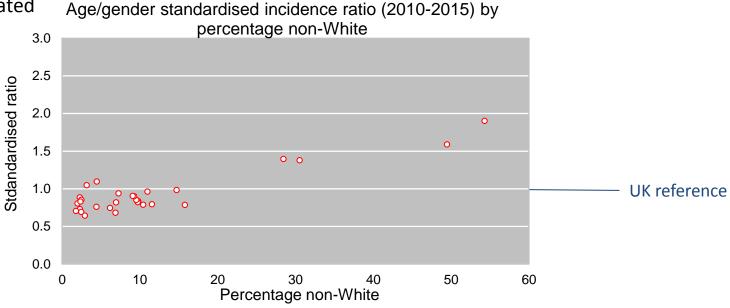


### RRT treatment rates by CCG

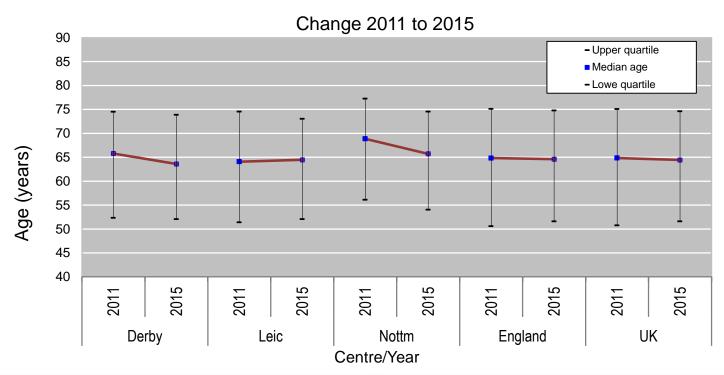
UK Area	Name		D/E		U 95% CL		% Non White
Leicestershire and	NHS East Loisestershire and Rutland	190	0.83	0.73	0.30	100	J.0
Lincolnshire	NHS Leicester City	278	1.59	1.41	1.78		
	NHS Lincolnshire East	152	0.80	0.68	0.94		
	NHS Lincolnshire West	103	0.64	0.53	0.78	73	
	NHS South Lincolnshire	97	0.88	0.72	1.08	111	
	NHS South West Lincolnshire	67	0.73	0.57	0.93	90	
	NHS West Leicestershire	216	0.82	0.72	0.94	93	6.9
Derbyshire and	NHS Erewash	68	1.04	0.82	1.32	118	3.2
Nottinghamshire	NHS Hardwick	56	0.70	0.54	0.91	84	1.8
	NHS Mansfield & Ashfield	114	0.85	0.71	1.02	97	
	NHS Newark & Sherwood	72	0.83	0.66	1.04	101	2.4
	NHS North Derbyshire	142	0.69	0.59	0.81	87	2.5
	NHS Nottingham City	223	1.39	1.22			28.5
	NHS Nottingnam North & East	//	0.74	0.59			
	NHS Nottingham West	74	0.94	0.75		-	
	NHS Rushcliffe	55	0.68	0.52			1
	NHS Southern Derbyshire	331	0.96	0.86	1.07	105	11.0
Hertfordshire and the S		43	1.09	0.81	1.48	107	4.5
Midlands	NHS Nene	376	0.90	0.82	1.00	98	9.1

#### RRT treatment rates by ethnicity

Big differences between CCGs, related to ethnicity



#### Change in median age at start of RRT

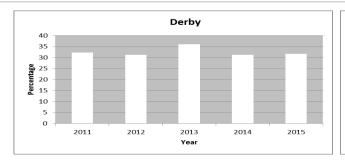


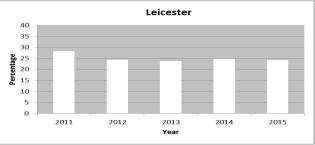


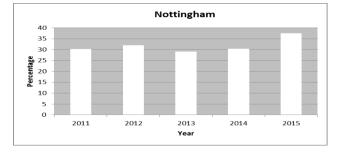
#### TREATMENT ADEQUACY PARAMETERS

#### Trends in attainment of CKD MBD standard (HD)

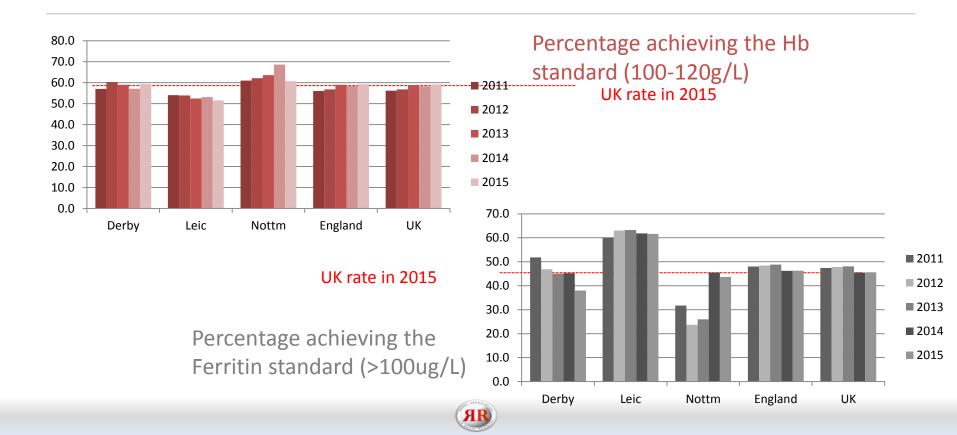
Percentage of haemodialysis patients within the ranges specified for the simultaneous combinations of bone and mineral disorder in preventing severe hyperparathyroidism 2011-2015





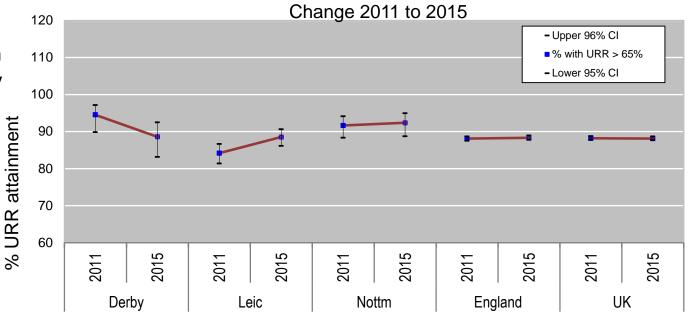


#### Trends in attainment of anaemia standards (HD)



#### Trends in attaining URR>65%

Percentage of prevalent patients on HD with URR>65% by centre in 2011 and 2015.



### **SURVIVAL**



#### One year survival from day 90

One year after 90 days survival adjusted to age 60, 2011-2014 cohort.

Centre	2014 cohort						
	Survival	L95%CL	U95%CL				
Nottm	92.5	88.2	97.1				
Leic	91.4	88.3	94.6				
Derby	95.7	91.1	100.0				
England	90.4	89.6	91.2				
UK	90.2	89.4	91.1				

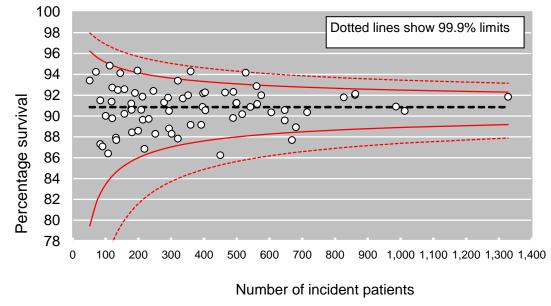


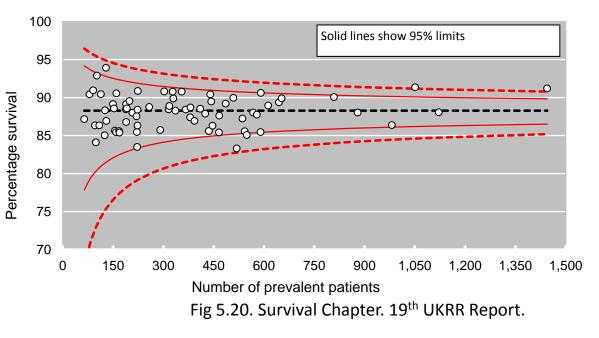
Fig 5.15. Survival Chapter. 19<sup>th</sup> UKRR Report.



#### One year survival from 31st Dec 2014

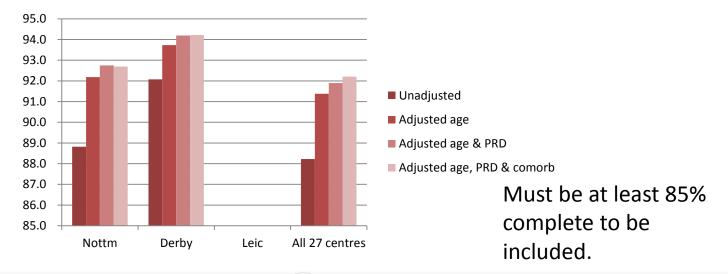
One year survival of prevalent dialysis patients by centre adjusted to age 60, 2014 cohort

Centre	2014 cohort							
	Survival	L95%CL	U95%CL					
Nottm	90.4	88.1	92.8					
Leic	86.4	84.5	88.3					
Derby	90.8	87.9	93.8					
England	88.5	88.0	89.0					
UK	88.3	87.8	88.7					



### Data completeness for co-morbidity

	Derby	Leic	Nott
Completeness 2014	97	(P)	99

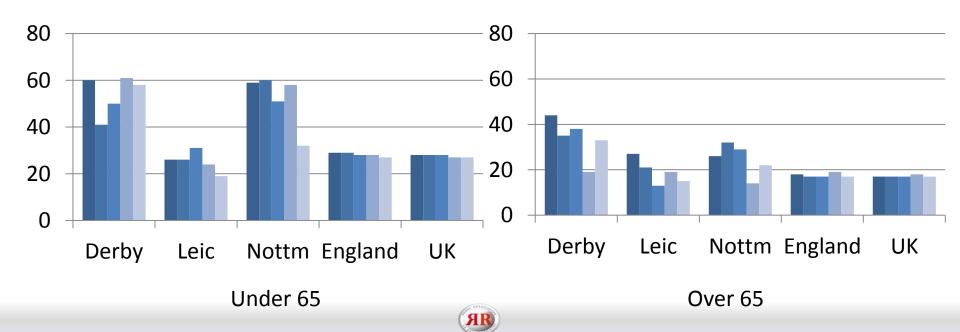




# HOME THERAPIES (HOME HD & PD)

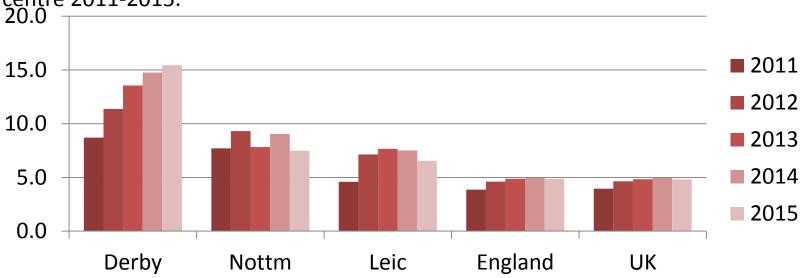
#### Rates of PD at day 90, by age

Percentage of dialysis patients treated with PD at day 90 by centre 2011-2015, split by age.



#### Rates of home HD, by centre

Percentage of prevalent haemodialysis patients treated with home haemodialysis by centre 2011-2015.



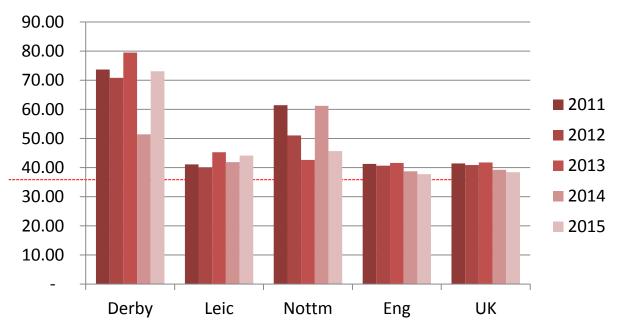
### **DIALYSIS ACCESS**



#### Trends in definitive access at first dialysis

Percentage of incident HD patients with an AVF or AVG at first dialysis.

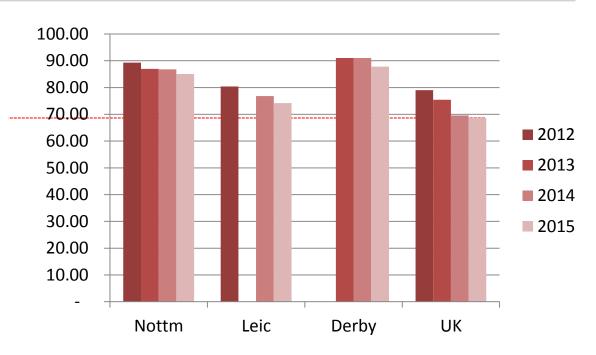
UK rate in 2015



#### Trends in definitive access in existing HD patients

Percentage of HD patients on 31st Dec with an AVF or AVG.

UK rate in 2015

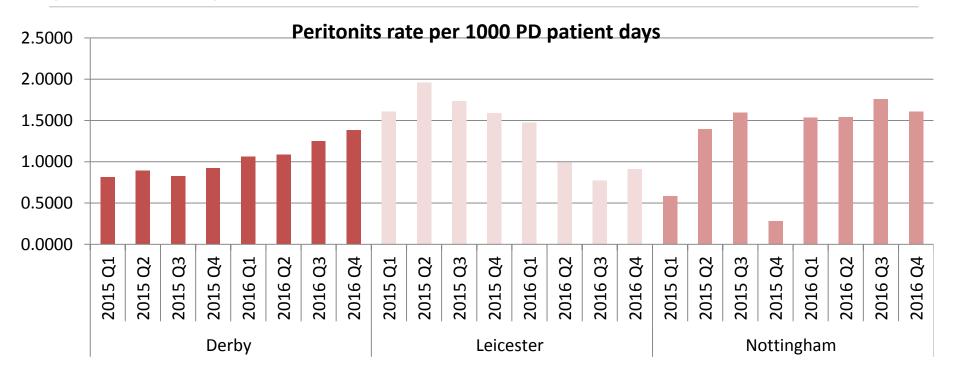


### **INFECTIONS**



#### PD peritonitis rates

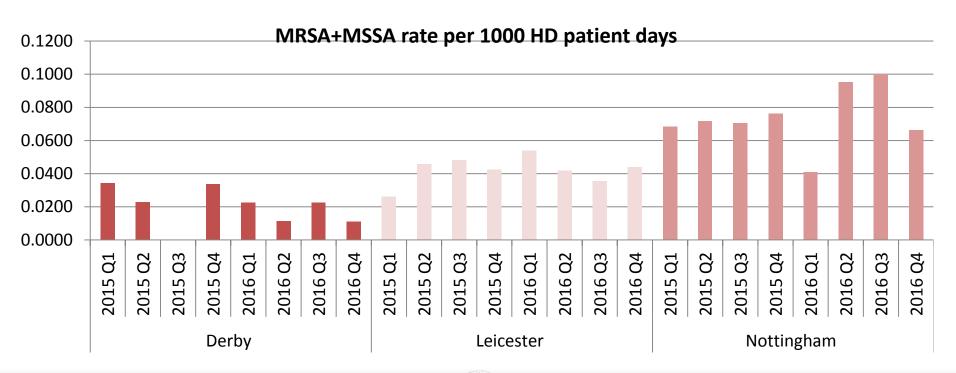
(Dashboard data)





#### MRSA & MSSA bacteraemia rates

(Dashboard data)





### **LATE PRESENTATION**



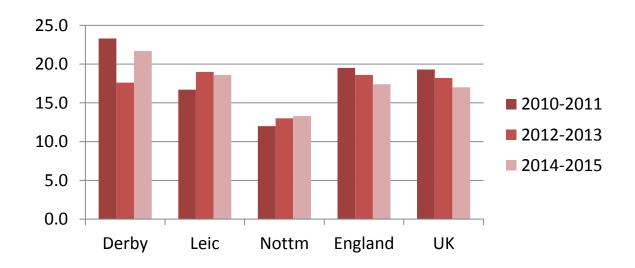
#### Late presentation for RRT, data completeness

Presenting within 90 days of first dialysis.

	Percentage completeness								
Centre	2011	2012	2013	2014	2015				
Derby	96.2	100.0	97.3	100.0	98.4				
Leic	96.6	97.0	96.6	98.0	98.2				
Nottm	97.4	98.0	97.3	97.3	94.4				
England	78.3	87.0	84.4	80.1	81.0				
E, W & NI	80.6	87.9	85.3	81.0	81.4				

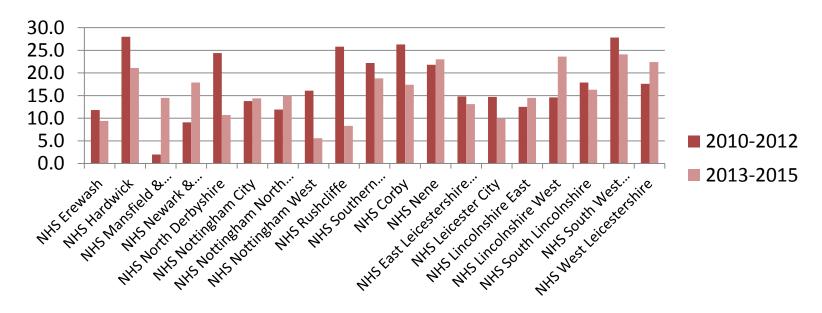
#### Late presentation for RRT, by CCG

Presenting within 90 days of first dialysis.



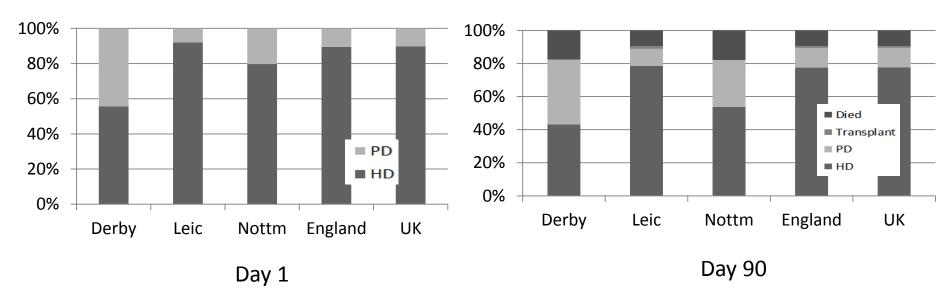
#### Late presentation for RRT, by CCG

Presenting within 90 days of first dialysis.



#### Late presentation and RRT modality

Modality at day 1 and day 90, in people presenting within 90 days of first dialysis.



### **DISCUSSION – 10 MINS**





### Acknowledgements

Thank you to **Dr Retha Steenkamp** and Lydia **Iyamu Perisanidou** (UKRR), who ran the analyses for this presentation.

Thank you to **Dr Simon Roe, Suzanne Horobin, Martin Cassidy, Sabhia Sheikh** who helped interpret the local data.

Thank you to all the UK renal units for providing data to the UK Renal Registry.

Current developments at the Registry are only possible thanks to the work of all many people...



@fjcaskey @UKRenalRegistry



# KQuIP/UKRR Regional Day East Midlands

11.00 - 11.20 - REFRESHMENTS



**KQuIP**