Kidney Suite Update - Stakeholder workshop discussion:

Monday 12th November 2018

Area of scope	Stakeholder views
Scope: overall impression • Does the scope make sense? • Overall, do we have the right focus?	Stakeholders were happy with the scope in general and discussed that the key papers in the surveillance report were important. Stakeholders agreed the questions that are included in the scope should be updated. Stakeholders highlighted that NICE should ensure that when the three guidelines are being amalgamated NICE should be careful to ensure areas were not missed. Stakeholders asked if NICE reviewed which guidelines don't get used. Stakeholders raised that the current phosphate recommendations are not used by the community. They also highlighted there were differences between the evidence and clinical practice, stating in clinical practice GPs may refer patients to secondary care outside of guideline recommendations. Stakeholders suggested the guideline could include a patient decision aid. Stakeholders highlighted the importance of raising awareness of the guidelines to non-CKD specialists (e.g. emergency department physicians) who may not be aware of the recommendations. Stakeholders noted it was important to ensure that children and young people were not disadvantaged by the guideline only looking at recommendations in some areas for this population.
Section 2: Who the guideline is for This guideline is for: • healthcare professionals in primary, secondary and tertiary care	Stakeholders queried if "families and carers" would understand the guideline, it was discussed that patient decision aids could be useful for this guideline Concern was expressed by stakeholders that:

• commissioners and providers • people with suspected or diagnosed chronic kidney disease and their families and carers.	• the amalgamation of the 3 guidelines would mean many of the recommendations would be irrelevant to some of the audience; it was felt important to specify who the recommendations are for • the previous NICE guidance was very complicated It was noted by stakeholders that most people with CKD are managed in primary care.

Section 3.1: Who is the focus? The population
 	
Groups that will be covered:
 	
Adults, children and young people with suspected or diagnosed chronic kidney disease.
 	
The following *subpopulations* will be covered.
 	
For management of mineral and bone disorder in chronic kidney disease:
• Adults, children and young people who are at risk of mineral and bone disorder with:
  ○ stage 4 or 5 chronic kidney disease who are not on dialysis and
  ○ stage 5 chronic kidney disease who are receiving haemodialysis or peritoneal dialysis
 	
For managing anaemia:
• Adults, children and young people with a clinical diagnosis of anaemia associated with CKD, including those:
  ○ with pre-dialysis CKD
  ○ with established renal failure receiving conservative management
	Stakeholders welcomed the inclusion of children and young people. It was noted that there might be advantages for practice, especially during the transition of care from childhood to adulthood.
	
	Stakeholders suggested that it be made clearer in the scope what stages of CKD are being considered.
	
	The following amendments were suggested by stakeholders:
	• Those with a family history of renal disease should be given specific consideration, recognising that they may need different disease management, diagnostic pathway, treatments.
	• Under groups that will not be covered, those with nutritional anomalies should be added as an example of anaemia that is not principally caused by CKD.
	
	Concern was expressed by stakeholders about the following issues:
	• Reference is made to CKD register but not everyone with CKD is on the register.
	• Not all patients with CKD are aware they have the condition.
	• “Conservative management” is explicitly covered in “managing anaemia” but not in “management of mineral and bone disorder”; need to ensure these patients are not inappropriately excluded.
	• How to distinguish between patients with renal replacement and patients with renal failure.
	• The age cut off for older people is detailed as 75 years.

or receiving renal replacement therapy ○ who have a functioning kidney transplant. Specific consideration will be given to the assessment and management of chronic kidney disease in: • Older people (75 years and older) • People from black, Asian and minority ethnic groups if their needs differ from those of the general population • People at high risk of developing progressive CKD (for example, people with: diabetes, hypertension, cardiovascular disease, or people recovering from acute kidney injury). ***Groups that will not be covered*** • Assessment and management of chronic kidney disease in: ○ people receiving renal replacement therapy (RRT) ○ people with acute kidney injury and rapidly progressive glomerulonephritis ○ pregnant women • Management of mineral and bone disorder in chronic kidney disease in adults, children and young people with stage 1-3 kidney disease. • Management of anaemia in people whose anaemia is not principally caused by CKD, for example anaemia caused by:	

○ haematological disease ○ acute and chronic inflammatory disease states ○ malignancy ○ acquired immunodeficiency syndrome ○ acute kidney injury.	
Section 3.2 Settings The guideline will cover all settings where NHS-funded care is provided.	Stakeholders suggested that care homes should be included. Stakeholders also discussed at what stages patients are going to be referred and also if the CKD classification going to change.
Section 3.3: Activities, services or aspects of care 1. When to use a cystatin C-based estimate of GFR for diagnosis of CKD • When to test for proteinuria in children and young people • When to test for haematuria in children and young people • Which children and young people should be tested for CKD? 2. Classification of CKD in adults, children and young people • Classification of CKD • Determining the risk of adverse outcomes 3. Frequency of monitoring in adults, children and young people • Defining progression of CKD	***Areas 1 and 2: Investigations for CKD/ Classification of CKD*** Stakeholders noted the following issues: • There is no single way to define progression of CKD and multiple factors need to be taken into account during assessment. • Risk assessment tools should be linked in with primary care and also in terms of who should be referred. • It could be helpful if the guideline could be more specific about what to tell the patient. • Currently, different hospitals use different techniques to calculate eGFR, there is a need for clarity. • The cystatin C-based estimate of GFR is costly and not used in practice. • Currently there is variation in terms of whether ACR or PCR is measured, it was noted that this can be confusing. • If haematuria is being considered in children and young people, it would make sense to also consider isolated invisible haematuria. • In terms of who should be tested for CKD, obesity is an independent risk factor. • There is no guidance for classifying CKD in infants and in particular very early preterm babies.

4. Management of mineral and bone disorder in chronic kidney disease in adults, children and young people • The use of calcium and non-calcium containing phosphate binders to manage mineral and bone disorder in chronic kidney disease. 5. Diagnostic evaluation and assessment of anaemia: • Diagnostic role of glomerular filtration rate 6. Managing anaemia • IV Iron for the treatment of anaemia associated with CKD	• Some children and young people have a rise in creatinine that has unknown origin and significance, guidance around this would be useful. ***Area 3: Frequency of monitoring of CKD*** Stakeholders noted the following: • A cohort study, of likely relevance, will be published early 2019 looking at optimal monitoring frequencies. • Frequency of monitoring should be specific for every CKD stage. • In defining progression, there is a need to differentiate between absolute decline as opposed to age-related decline. • Some patients are at higher risk for progression (examples given included people with diabetes, hypertension) • Currently patients in the same CKD stage but with different prognoses and rates of change are monitored with the same frequency. It would be helpful for guidance to address the issue that patients experience different rates of change, and advise around management for those experiencing accelerated decline and how to assess if a patient is at risk of accelerated decline. The following questions were suggested: ▪ What is rate of progression? ▪ What is accelerated progression? ▪ What contributes to progression? • Pubertal growth spurts in young people can confuse clinical measurements. ***Area 4: Mineral and bone disorders*** Stakeholders noted the following: • People are starting to use phosphate binders (and other drugs) at earlier stages of CKD. ***Area 5: Diagnostic evaluation and assessment of anaemia*** It was noted by stakeholders that:

	• Question 5.1 is “the wrong way around” concerning eGFR triggering investigations of anaemia. • Some paediatric centres are having trouble keeping haemoglobin (Hb) levels between 100 and 120 (currently recommended by NICE), which is causing undue stress to some practitioners while possibly not being absolutely necessary (Phrommintikul 2007 was referenced). The approach to managing anaemia is more nuanced than just using reference ranges. It would be helpful to add whether anaemia is attributable to CKD or has other causes (i.e. is it renal anaemia or not?), some people may have a primary haematological disorder instead. ***Area 6: Managing anaemia*** In relation to the proposed question in the scope focusing on IV iron, stakeholders noted that: • New evidence is forthcoming on IV tablets but might not be published in time for this update. • License on these new iron preparations will be ready mid-2019. Stakeholders also noted the following: • There is a need, with regards to the management of anaemia, to know what underlines renal disease, for example, diabetes. • The guideline should cross reference should be made to the chronic pain guideline that is currently in development • Diet and lifestyle should be added to this section Stakeholders raised that there are people who are managed in primary care who are not receiving erythropoiesis-stimulating agents because they have not been referred onto secondary care. Stakeholder highlighted the following studies of potential relevance: ▪ STOP-ACEi

	▪ SIMPLIFIED (Survival Improvement with Cholecalciferol in Patients on Dialysis) ▪ SPRINT (hypertension) ***Areas not covered in scope*** Stakeholders felt hypertension should be added to the scope, noting that people with CKD and hypertension are treated differently to those with hypertension alone.
Section 3.5: Key issues and Questions 1.1 What is the accuracy of cystatin C-based equation to estimate GFR as a measurement of kidney function in adults, children and young people? 1.2 In children and young people with CKD, what is the sensitivity and specificity of reagent strips for detecting protein and blood in urine? 1.3 What are the benefits in terms of accuracy and cost in measuring albumin:creatinine ratio versus protein:creatinine ratio to quantify proteinuria in children and young people with CKD? 1.4 Which children and young people should be tested for CKD? 2.1 What is the best combination of measures of kidney function and markers of kidney damage to identify adults and children	Stakeholders felt it is important to provide primary care with guidance on how to put recommendations into practice, e.g. regarding re-testing eGFR. Stakeholder thought this would impact the number of referrals to secondary care. Regarding question 1.2 (reagent strips for detecting protein and blood in urine) in, it was raised by stakeholders that there is likely to be a difference between children and young people and adults. Regarding question 1.3 stakeholders believed that the current evidence for ACR vs PCR agrees with current guidance but noted that PCR is used as a clinical management tool not a screening/identification tool. Regarding question 2.1 stakeholders felt that reference to ‘markers of kidney damage’ is very broad and may need to be made more explicit for GPs and patients. Regarding question 3.1 stakeholders noted this question as very important. It was raised that defining progression and risk factors are considered together in practice and as such should be considered together when updating the guideline. Regarding question 4.1 & 4.2 stakeholders raised that there is an issue with adherence to binders and healthcare professionals.

with CKD who are at increased risk of progression? 2.2 For adults and children with suspected CKD, what is the effect of proteinuria and/or albuminuria at any given eGFR on adverse outcomes? 2.3 For adults and children with suspected CKD, what is the effect of interventions to lower proteinuria on favourable outcomes? 3.1 For adults and children with CKD, what constitutes a clinically significant decline in eGFR? 4.1 For people with stage 4 or 5 CKD who are not on dialysis, which phosphate binder, calcium and non-calcium containing, is most effective in managing serum phosphate and its associated outcomes? 4.2 For people with stage 5 CKD who are on dialysis, which phosphate binder, calcium and non-calcium containing, is most effective in managing serum phosphate and its associated outcomes? 5.1 For people with CKD, what eGFR threshold should trigger investigation of anaemia being due to CKD? 6.1 For people with stage 5 CKD who are on dialysis, what amount of intravenous iron	Regarding question 5.1 stakeholders highlighted the issue of over- and under-investigating anaemia being due to CKD, and the need for guidance in this area. It was noted that thresholds are not clear on when to start investigations with nephrology. Regarding question 6.1 stakeholders noted there was no new evidence around ESAs. The cost-effectiveness of biosimilars was noted as being on the horizon and could be included in the update. Stakeholders noted that when drugs came off-patent they would be cheaper. In relation to intravenous iron, it noted that a higher dose of IV iron might require less erythropoietin.

is most effective in managing anaemia and its associated outcomes?	
Section 3.6 Main outcomes • Mortality (all cause and cardiovascular) • Morbidity, including progression of CKD, fractures, advancement of renal bone disease, vascular calcification, cardiovascular impact, anaemia, and other related issues • Hospitalisation • Patient safety (serious adverse events) • Health-related quality of life • Markers of mineral and bone disorder in chronic kidney disease – phosphate, calcium, parathyroid levels • Markers of anaemia- haemoglobin, iron and ferritin levels • Patient reported outcomes and experience	Stakeholders suggested the following outcomes could be included: • Prescribing to consider the potential for drug interactions and inappropriate prescribing • Hospitalisation should consider inpatient vs outpatient, planned vs unplanned • AKI or a measure of AKI • Reticulocyte Hb content as a marker of iron storage • Percentage of hypochromic red blood cells as a marker for iron mobility. Stakeholders commented that ferritin was considered the least useful outcome for measuring iron storage.
Equalities The guideline will look at inequalities relating to age, disability, race, socioeconomic group and sex.	Stakeholders suggested the following could be considered in the guideline equality impact assessment: • Frailty (strongly linked with age) • People with learning disabilities, in particular when planning for RRT and facilitating ongoing monitoring • The prison population • The effect of lithium on CKD given to some people with mental health problems • The effect of DOACs in cardiovascular disease • Ethnicity modifiers for eGFR formula

	Stakeholders raised there are equalities issues surrounding implementation of the recommendations with some population groups not receiving the care they should and access to services in certain areas of the country.
Scope in general: Any other comments on the scope	Stakeholders questioned the use of the word "cause" in section 1.2 Classification of CKD the in subsection "Investigating the cause of CKD and determining the risk of adverse outcomes".
Acute Kidney Injury **The following question is being updated:** 1.1 What is the clinical and cost effectiveness of N-acetylcysteine and/or intravenous fluids in preventing contrast induced-acute kidney injury in at risk patients?	Stakeholders agreed that this question does need updating but stakeholder opinion varied as to whether it was the most important part of the guideline to update. It was suggested that the question should be expanded to ask what the best approach is rather than just focusing on N-acetylcysteine. It was noted that N-acetylcysteine is easily available for hospitals. It was suggested by stakeholders that a more comprehensive update may be required at a later date.
Guideline committee composition: Chair Early committee members: • Paediatric nephrologist • Renal physician • General Practitioner Proposed committee: Full members: • Additional renal physician • Renal Specialist Nurse	Stakeholders suggested that the guideline committee could also recruit: • A Cardiologist/physician with a specialist interest in cardiology in the main committee because CKD and cardiovascular disease are so interlinked • Another GP • A dietitian to be a full member of the committee • A haematologist to be a full member of the committee • A general nurse working in primary or secondary care instead of a renal specialist nurse

• Pharmacist • Chemical pathologist/ clinical biochemist. • 2x lay members • (Possibly 1 paediatric lay member) • Someone with some commissioning experience Co-optees (for relevant questions): • Haematologist • Radiologist • Dietitian • Intensive care specialist	Stakeholders suggested that the guideline committee could co-opt for relevant questions: • A geneticist • A specialist in big data/modelling • A psychosocial worker • For the AKI question an intensive care specialist Stakeholders liked that a paediatric lay member was being considered.