Renal patient workshop Pre-read document – extended version

- Proposed interventions (detailed)
- Background to programme
- Glossary

Please note that we **do not** expect you to have read this fully, however we know that some people will want to read further detail. The interventions will be explained by clinicians at the workshop.

Summary of the proposed opportunities within renal

Below is a summary of all eleven proposed interventions for renal services. The following pages go into further detail about each intervention.

No.	Renal interventions
1	Ensure that patients have the information and support they need so that they can decide upon the best treatment option for them (e.g. dialysis, transplantation and home/self-care)
2	Maximise the number of patients who are well informed about the different care options available to them as they approach end of life, and the implications of each, so patients receive the most suitable care for them at the end of their life.
3	Introduce 'virtual clinics' (dedicated time slots for specialist renal hospital staff and GPs to discuss the care of specific patients) and electronic 'trigger tools' to flag high risk patients.
4	Improve the overall standard of home-dialysis training quality and efficiency, with a view to increasing home-dialysis uptake
5	Pool/ share and better utilise existing south London dialysis units
6	Create centralised, high volume vascular access centres to undertake complex and non-complex vascular procedures
7	Increase collaboration within renal transplantation services
8	Standardise renal service processes across south London hospitals, particularly focussing on improving referrals from GPs to tertiary/ specialist centres.
9	Create a standardised, pre-emptive transplantation protocol which follows best practice, to ensure a consistent approach across south London, Kent, Surrey and Sussex
10	Introduce collective purchasing (i.e. join up procurement) across South London hospitals where beneficial to do so.
11	Increase nephrology input into District General Hospitals

Should we decide to proceed with each of these interventions, we acknowledge that change will not be easy. There are challenges involved with successfully implementing each of the proposed interventions and many additional individuals (including clinicians) within the health system will need to be involved in discussions to help shape the way forward.

Intervention 1: Ensure that patients have the information and support they need so that they can decide upon the best treatment option for them (e.g. dialysis, transplantation and home/self-care).

Current situation:
Currently there is some inconsistency and variation in the renal treatment options that are offered to patients, depending upon which hospital is attended. The conversations that clinical staff have with patients to explain the various treatment options available to them also varies greatly across services and staff. Some conversations present a more complete range of options (and the implications associated with each option) than others. Currently there is inconsistency in how patients are being informed of the various treatment options available to them, and the implications of each treatment. As a result it is possible that patients may not always end up receiving the most appropriate treatment for them.

What is the opportunity?

Ensure that patients have the information and support they need so that they can decide upon the best treatment option for them. Increasing consistency in the information and options provided to renal patients regarding their treatment, across hospitals in south London will help to deliver this. This should be supported by:

- **Developing consistent 'patient pathway' protocols which are in line with best practice**: Outline what the optimum renal patient journey would look like and what key information patients should be provided with and when. These protocols should then be followed across all south London specialist renal services, (i.e. Epsom and St Helier, King's College, Guy's and St Thomas' and St Georges Hospitals) to ensure a standardised, consistent level of service for patients. This intervention will involve gaining agreement on what constitutes 'best practice' - for example, optimum pre-emptive transplant levels and how transplant assessment is undertaken. To gain this agreement a working should be formed, made up of a range of clinical staff from across south London hospitals.
- **Offering additional training to clinical staff (e.g. nurses and doctors) to enable them to hold better conversations with patients:** These conversations should be informed by clinical best practice and aligned to agreed protocols (described above). This will mean that better quality information about the various treatment options available is provided, and at times it is likely that additional treatment options will be given to patients than at present. If the education given to patients regarding their treatment options is improved, patients will be better able to make decisions around what the best treatment option is for them (e.g. dialysis, transplantation and home/self-care). Clinical staff may also require additional time with patients during appointments to have these improved conversations.
- **Developing education material for patients regarding each of the treatment options available to them:** This documentation should be in line by best practice/ evidence based and it should consistently used across south London specialist renal services. Again, it will align with the training provided to clinical staff and the pathway protocols that are developed (above).

If this intervention is implemented then the benefits for patients would include:

- A greater choice and understanding of the different types of treatment offered and the clinical implications of each of these. Therefore patients should be better able to make the most informed decision based on their individual circumstances.
- Consistency across hospitals in the information provided to patients, regarding the different treatment options available. This means increased equality in the level of service provided.

Intervention 2: Maximise the number of patients who are thoroughly informed about the different care options available to them as they approach end of life, and the implications of each, so patients receive the most suitable care for them at the end of their life.

Current situation:

'End of life' refers to the period of time over which someone is approaching the end of their life. This can be weeks, months or even years. Like all care, end of life care should help people to live as well as possible until they die. It is recognised that 'end of life' is a particularly sensitive time for everyone involved and sometimes it is difficult for clinical staff to have frank conversations with patients and their families. Currently there are inconsistencies in the conversations that are taking place between clinical staff and patients around the care provided at end of life; there are differences in the information that patients receive depending upon which hospital they attend.

Currently some patients are not provided with enough information and support around treatment decisions (i.e. starting conservative treatment, rather than starting dialysis, or moving off dialysis onto more conservative care). Deciding to proactively move away from dialysis, which they may have been on for years, can be a significant decision, and time and information is needed to do this well. A common reaction is for patients and families to continue (or start) dialysis as the default option because they think it is likely to be beneficial (which is not always the case) or it is what they are used to. It can be difficult for staff to have sensitive conversations with patients about approaching end of life, more appropriate care options and the effectiveness of these conversations varies. Staff do not currently have all the support that they need in this area.

What is the opportunity?

To maximise the number of patients who are thoroughly informed about the different care options available to them as they approach end of life, and the implications of each, so patients receive the most suitable care for them at the end of their life: The focus of this intervention would be on stopping dialysis for patients who, when provided with all the information, feel that more conservative care is more suitable for them. This would be achieved through:

- Developing an approach regarding the best practice care options at end of life with the full range of clinical staff (including renal doctors, nurses and palliative care representatives) from all renal services. This approach would involve this range of clinical staff devising protocols, which are then applied consistently.
- Developing and distributing educational materials for patients regarding each of the care options approaching end of life which are consistent across renal services at the different hospitals

Intervention 2 (continued): Maximise the number of patients who are thoroughly informed about the different care options available to them as they approach end of life, and the implications of each, so patients receive the most suitable care for them at the end of their life.

- Adopting a consistent approach to assessing patients on dialysis who may be approaching end of life.
- Adopting a consistent approach to conversing with patients on dialysis whose assessment indicates that they are approaching end of life. These conversations will involve providing patients with alternative options to dialysis, and outlining the pros and cons of the care options available.
- Improved access to the right people to discuss end of life options (e.g. palliative care team) for those individuals assessed to be approaching end of life.

It is important to state that the decision around which care option to take forward will remain with the patient and, if a patient would like to remain on dialysis during the final months and weeks of their life then they will be able to do so. This intervention is about better educating patients so that they can make a more informed choice. In addition to developing a consistent approach to conversations, the amount of time made available for these discussions must also be well considered because these discussions will be sensitive in nature.

Benefits of this intervention for patients include:

- Improving the identification of patients approaching the end of life under a consistent, systematic approach supports the best care being provided to patients.
- Consistency in information and conversations around end of life care with these identified patients means that patients will be better able to make the best choice for them, based on all of the information and options available. This is likely to mean that patients will have a better experience during their end of life period. For example, a patient may decide that they do not want to go into hospital for dialysis three times a week during the last year, or months of their life, and they will have alternative care options available to allow this decision to be made.

Intervention 3: Introduce 'virtual clinics' (dedicated time slots for specialist renal hospital staff and GPs to discuss the care of specific patients) and electronic 'trigger tools' to flag high risk patients.

Current situation:

Whilst some GPs and hospital specialists (e.g. renal doctors and nurses) are well co-ordinated and have good communication, it is recognised that coordination and communication between GPs and hospital specialists could be improved in some cases.

Also, specialist hospital staff receive a number of referrals from GPs that they would assess as 'inappropriate', or be patients which they think could and should have been managed by GPs.

What is the opportunity?

Improve co-ordination, communications and relationships between GPs and hospital specialists so that patient care is improved. There are a number of ways this can happen:

Introducing 'virtual clinics' across south London, which involve both specialist clinicians and primary care staff (e.g. GPs). In these 'virtual clinics' the condition and care of specific patients will be discussed either over the phone (using a conference call will be used if more than two individuals are involved) or via a webinar, which is similar to Skype (web-based communication). These virtual clinics do not require clinical staff to travel. The clinics will be an opportunity for GPs to gain a rena; specialist's opinions about specific patients, which will further educate GPs about kidney/ renal conditions and, as such, is likely to improve preventative healthcare. Virtual clinics should also include the development of shared 'patient data viewing agreements', so that specialist staff and GPs have access to the same information. This is important to support collaborate decision making.

Improving communications between hospital specialists and GPs should also help to educate GPs about when it is suitable to refer to a specialist and when it is inappropriate to do so. This improved GP education should reduce the number of inappropriate referrals which has a number of advantages:

- waiting times for specialist advice could be significantly reduced for the patients that need it if the demand for specialist input is reduced by preventing inappropriate referrals to specialists from GPs.
- If appropriate support from GPs or other community staff (e.g. nurses) is provided more quickly, then this can help reduce the deterioration of the patient's condition. If the rate of decline in a patients condition can be reduced then this can help delay, or even avoid, the need for dialysis or a kidney transplant.

Introduce the use of community Chronic Kidney Disease (CKD) trigger tools: Patients with CKD are at an increased risk of developing Acute Kidney Injury. The sooner it is recognised that a person has CKD the better, because actions can be taken to prevent a decline in that individuals health. The idea is that if a routine blood test identifies a patient with CKD then this automatically triggers an alert to be sent to the patients GP, informing them that the patient is 'at risk'. Then the GP practice can ensure they navigate this patient to the appropriate preventative care, e.g. patient education sessions and 1:1 nurse education sessions which inform the patients of how to look after their kidneys. Pilot schemes, such as Birmingham's 'ASSIST-CKD project', have been very successful and have shown a decrease in overall dialysis growth rate since introducing the use of trigger tools. Further information on this programme can be found: https://www.kidneyresearchuk.org/research/assist-ckd

Intervention 4: Improve the overall standard of home-dialysis training quality and efficiency, with a view to increasing home-dialysis uptake.

Current situation:

Home dialysis is when dialysis is undertaken in the patient's own home, rather than in a hospital or satellite unit. Training needs to be provided to patients so that they know how to support their own care. This training is currently provided at the four south London hospitals that provide renal services.

Currently a small amount of home dialysis is being provided to renal patients, compared to international benchmarks and best practice standards. Many patients that have home dialysis find it a very suitable care option which is less disruptive to their life than if they needed to travel to receive dialysis. Discussion with clinicians suggest that the number of people receiving home therapy could be increased by improving the provision of home dialysis training to patients, so that patients feel more comfortable and confident about home dialysis.

What is the opportunity?

Improve efficiency in the way that home therapy dialysis is delivered and improve the rates of home therapy dialysis. This can be supported by improving the delivery of home dialysis training and make the training consistent across south London, and in line with best practice. This can be done using one of the methods below:

- Option 1: All four south London hospitals that provide renal services contract one private sector provider (e.g. Baxter or Fresenius) to provide both the home dialysis support service as well as the training that needs to be given to support home therapy. The contractual arrangement would be formed to incentivise an increase in the number of home dialysis cases.
- Option 2: Have a single coordinated NHS employed team that provide home dialysis training and support, for the 4 south London hospitals. This option would involve joining up the teams operating at present, which would involve strong change management skills.
- Option 3: Have four separate teams (one at each hospital site), but share resources to optimise capacity.

Please note: whilst you are free to provide your thoughts around the three options above, at the workshop we would like to focus more on the general intervention idea, rather than which of the 3 options is preferred. If this intervention is taken forward then further analysis will need to be given in order to decide which option is best. For each of the options above, best practice training would need to be agreed upon by clinicians across the hospitals.

The benefits of this intervention for patients include:

- If a high quality home dialysis training programme is consistently available across south London, then, because patients are more likely to feel confident and comfortable with it as a treatment option, it is expected that there will be an increase the rate of home dialysis seen. Given the positive feedback that patients on home dialysis have communicated tis is assessed to be beneficial for patient experience. Of course, the decision of whether home dialysis is the most suitable options for them will still be given to every patient.
- Coordinated training that is standardised and in line with best practice will improve the quality of the training provided across south London and so patients will receive an improved education about home dialysis. This should transfer into both improved clinical outcomes and patient experience.

Intervention 5: Pool/ share and better utilise existing south London dialysis units

Current situation:
Dialysis units in south London are currently run by a range of individual providers. This includes units that are run directly by NHS hospitals (including satellite units) and units that are contracted by the hospitals to be run by private organisations (often in partnerships). Currently there are many parts of south London where capacity and demand for dialysis is not aligned. A number of dialysis units are under-utilised (i.e. have wasted capacity/ are able to take on more patients but this is not used). In contrast, a number of dialysis units are currently at full capacity (i.e. do not have space to take on new patients) and there are a number of business cases in development across south London which aim to expand dialysis unit provision, to be able to meet the increase in demand for the service. Expanding or building additional dialysis units may not be necessary if:

- there is better management of existing capacity whereby patients are spread out more across the dialysis units available, i.e. reducing units that are over-used and those that are under-used and moving them both towards the optimal level of utilisation
- anticipated growth in dialysis demand does not actually happen as a result of interventions within this programme being successfully implemented (many of which aim to reduce dialysis demand).

Also, at present some patients are currently travelling long distances for dialysis, which is poor for patient experience and can also have a transport cost implications for both patients and hospitals.

What is the opportunity?

Improve the extent that patients are 'pooled' across the south London dialysis units. Pooling of patients would increase the likelihood that patients will be able to access a dialysis unit which is close to where they live because there should be more units for each patient to choose from. As an example, pooling of patients could mean that a patient who is under the care of Guy's and St Thomas' could receive dialysis at a satellite unite run by King's College Hospital, if that unit is the closest unit to where they live. It could also be implemented in a way whereby the hospitals share the satellite sites. A thorough assessment of the best set-up needs to be undertaken but the impact on patients would be similar within either model.

Better utilise the existing South London dialysis units: This can be done by ensuring that patients are better allocated out across those units which are over-utilised and those which are under-utilised. This is better able to happen if patients are 'pooled' across hospitals. Combining the better utilisation of existing dialysis units with minimal growth in the number of patients that need dialysis and an increased take-up of home dialysis (which assumes the successful implementation of other interventions within this programme), there are likely to be opportunities to limit the development of additional dialysis units, because the demand for them will not be there.

Anticipated benefits for patient include:

- A potential reduction in dialysis unit allocation waiting times compared to that the current wait.
- The potential to improve care and levels of quality as a result of optimal patients numbers attending dialysis facilities (i.e. not too many and not too few)
- Some patients will be able to access a unit which is closer to their house and so has shorter travel times.
- It should give some patients better access to dialysis at a time that is convenient for them. This is particularly likely for those patients that would otherwise be attending a over-utilised unit (as there are fewer slots available than if fewer people use that unit because they use other units).

Intervention 6: Create centralised, high volume vascular access centres to undertake complex and non-complex vascular procedures

Current situation:

'Vascular access' describes a method of gaining entry to the bloodstream to allow for haemodialysis. Methods include fistulas, catheters or grafts. Establishing good access to the bloodstream is crucial to the success of dialysis and high quality vascular access is an important measure of good clinical care.

The Renal Association recommends that 80% of patients receive dialysis through a arteriovenous (AV) fistula or arteriovenous graft, however at present the rates vary greatly, from 19 – 76%. The variation in rates are believed to be driven by:

- Variation in access to theatres or day case beds
- Variation access to interventional radiologists
- Variation in capacity of vascular surgeons

Access to theatres or day-case beds, interventional radiologists and vascular surgeons are required in order for patients to receive dialysis through a fistula or graft. As well as variation in the uptake rates between sites there is also variation across south London hospitals in the waiting times for having a fistula or graft – at some hospitals the wait to have a fitting is longer than at others.

Currently all south London hospitals are providing vascular access services individually. This approach, along with the current capacity issues, results in:

- In some case, patients are waiting a long time for a fistula or graft to be fitted and so they need to have a venous catheter for vascular access in the short-term. Thus, some patients are having multiple procedures when they could have only had one.
- Lack of consistency in whether procedures are done under local or general anaesthetic resulting in varying length of stay and patient experience between hospitals. At some hospitals patients spend less time in hospital following a procedure than at other hospitals.

What is the opportunity?

There is an opportunity to:

- **Create one or two centralised vascular access clinics to meet the demands of the whole of south London and provide AV fistula and graft procedures in a timely manner.** These centralised vascular access clinics will have dedicated staff (i.e. interventional radiologists, vascular surgeons, nurses etc) and will provide additional capacity compared to the existing set-up.
- **Review the vascular access protocols in place across hospitals and develop 'best practice' protocols.** This will support both consistency in practice and the sharing of best practice. Best practice protocols should increase the number of patients who receive haemodialysis through an AV fistula or graft - moving closer towards the Renal Association's recommended rate of 80%. The idea is that these best practice protocols will be agreed by clinicians from across south London and will be applied within the centralised vascular access centre(s).

There are examples of this model working successfully in the USA and Europe and these examples should help to inform the implementation of this intervention. Interdependencies with existing renal services in hospitals will need to be well managed.

Intervention 6 *(continued):* Create centralised, high volume vascular access centres to undertake complex and non-complex vascular access procedures

This intervention is expected to have a number of benefits for patients:

- Centralised vascular access centres that have greater opening hours and are dedicated to performing AV graft and AV fistula procedures should reduce the amount of time patients need to wait to receive these procedures. Having dedicated resource should also help improve the efficiency of the centre, because staff will be undertaking the same activities day in, day out – thus this should also support additional capacity. The 'length of stay' improvement described below is an example of this.
- Through the use of standardised processes which are in line with best practice, 'length of stay' (the amount of time patients need to stay in hospital after their procedure) should be consistent for all patients across south London, and the length of stay should be at the optimum level (i.e. not too long and not too short) in line with clinical best practice. If patients are in hospital for the optimum amount of time then this improves patient experience and clinical outcomes.
- For patients whose hospitals have low accessibility for these procedures altogether) it will increase accessibility of these vascular access procedures.
- Centralised vascular access centres should also improve the quality of the procedures undertaken. This is because agreed protocols for the centre will be in line with best practice and the expertise of staff in the centres should increase due to the high volume of patients seen. The existing quality issues in south London should be easier to overcome through developing a standardised, centralised services. There is also likely to be a reduced risk of complications or failure of access because there will be dedicated specialists working in the centre completing the procedures, meaning that better outcomes should be achieved.
- Improved innovation, research opportunities and application of findings should come about through a centralised centre which can embed specialists in vascular access procedures and this will improve patient care.
- Although, in theory, patients will have reduced choice in which hospital to receive a vascular access procedure from, this should be offset by all the advantages of the centralised model which have been outlined above.

Intervention 7: Increase collaboration within renal transplantation services

Current situation:
At present there are reported to be pressures on renal transplantation services which are contributed to by running kidney transplantation services at both Guy's Hospital and St George's Hospital. These include:

- Demand and capacity issues/ not enough access to theatre space. Estate capacity issues for both hospitals have been reported (i.e. there is not enough room on each hospital site to accommodate the patients that require transplantation services).
- Current staffing rotas and workforce set-ups that are preventing the maximum level of transplantation occurring.
- Lack of 24/7 interventional radiology, dedicated theatre capacity and ultrasound to support transplantation and recovery.

A London-wide renal peer review (which involved renal specialists reviewing the work of other renal specialist services) highlighted that the care provided by transplantation services varies between hospitals.

What is the opportunity?

There is an opportunity to work more collaboratively between the two transplant services so that the existing issues can be addressed. This could range from increased collaborative arrangements between all or some of the transplantation related services in south London, (for example, with staffing rotas and the scientific preoperational/tissue matching work), right through to having one transplantation centre to meet the demands of the south London and south region population.

Increased collaboration around transplantation services will have many advantages for patients. Of course, the extent of collaboration will impact the extent of the benefits. Benefits include:

- An improved quality of care should be seen through a dedicated team that undertakes high volumes of transplantations in line with best practice. As a result, clinical outcomes are likely to improve and patients length of stay in hospital following transplantation will be at the optimum level (if patients are being discharged from hospital at the right time then this will also help to maximise service capacity as patients will not be staying in hospital for an unnecessarily long time and patients are also less likely to require re-admission).
- If only one transplantation centre is available in south London then it will mean some people's transplantation will take place further away from home than in the current model. However, this needs to be balanced against the benefits. Additionally, a model could be adopted whereby only the transplantation operation is delivered at one single site, and clinical preparatory work (work-up) and post-surgical care (follow-up) occurs in services closer to home.
- If the service or services are sufficient in size, it may allow for a dedicated consultant and anaesthetist at night as well as a dedicated night transplant team which would further result in this benefit.
- Opportunities to improve research and development through scale, and sub-specialisation being possible. This research will translate through to improved patient care and clinical outcomes.

Intervention 8: Standardise renal service processes across south London hospitals, particularly focussing on improving referrals from GPs to tertiary/ specialist centres.

Current situation:
Currently there is variation in how a patient gets referred from a GP to a specialist renal service, depending upon which part of south London, Kent, Surrey or Sussex the individual is in.
There are inconsistencies in the service that patients receive across the areas.

What is the opportunity?

This opportunity is focused on providing best practice in renal specialised services *consistently* across south London hospitals, with a particular focus on ensuring that how GP practices refer into tertiary/ specialist hospitals is optimum. This can be achieved in two ways:

1. **Standardise processes by creating consistent renal 'patient pathways' (or patient journeys):** Existing renal 'patient pathways' in south London should be reviewed in order to identify best practice. Once this review has been undertaken and best practice has been agreed, guidelines and protocols on specialised renal service delivery would be developed, along with incentives to support hospital compliance with this best practice. Strong clinical engagement will be required and buy-in will be required from clinical teams at all four hospital sites, as well as from primary care clinicians/ GP practices.

2. **Increase training and support to primary care/ GP practices:** Improve guidance provided to primary care sites (including GP practices), particularly regarding how to refer appropriately to specialist renal centres in hospitals. This should increase the likelihood that patients are sent to the most suitable location for their health conditions. This will involve hospitals having improved access to primary care/ GP practice IT systems, so that there is more patient data transparency. This will enable specialist renal services in hospitals to review patient data and request the most appropriate patients to attend specialist service. GPs/ primary care sites ware likely to become better educated around which patients are higher risk and require referral to specialists.

Implications for patients include:

- Equity of access to services and in the level of care provided for the population of south London, Kent, Surrey and Sussex.
- If the people who needs to be referred to a specialist centre are referred and those that so not need to be are not then this is the most efficient use of specialist resources and it also means that patient experience will improve (e.g. because those that need to see a specialist wait less time to do so).
- There is a 'length of stay' benefit associated with standardising care across hospitals in line with best practice. If care is standardised and consistently provided in line with the agreed clinical best practice then, on average, patients are more likely to be fit for discharge from hospital earlier than they are at present. This means that patients will be more well, and require either no or reduced specialist input sooner.

Intervention 9: Create a standardised, pre-emptive transplantation protocol which follows best practice, to ensure a consistent approach across south London, Kent, Surrey and Sussex

Current situation:

Pre-emptive transplantation is when a kidney transplant takes place before the patient has commenced any dialysis. Pre-emptive transplantation is regarded the best form of renal replacement therapy in terms of improving survival chances and the quality of life of patients with established renal failure. Kidney transplantation is also a cost effective form of treatment. The transplant can be a kidney alone, for patients with renal failure, or a combined kidney and pancreas for patients who have both diabetes and renal failure.

Despite being the best treatment available, the current pre-emptive transplantation rates vary across London. There are differences in the protocols that are used by different specialist renal services which are thought to explain this variation in rates. There is the opportunity for some services to make kidney transplantation more accessible to patients and, as such, some renal services in south London could increase the number of patients on a pre-emptive transplantation pathway.

What is the opportunity?

Develop a single, consistent and best practice pre-emptive transplantation 'patient pathway' for south London and the adjoining south region: Currently each of the four south London hospitals with specialist renal services has their own protocol. A clinical working group, with representatives from across hospitals (both doctors and nurses) would work together to develop consistent criteria that are required for a patient to be eligible to enter the pre-emptive transplantation pathway. Those patients who meet the criteria would need to be provided with detailed information around kidney transplantation as a potential treatment option. This should be further supported through clear guidance for hospitals on the proportion of patients that should be on the pre-emptive transplantation pathway.

A single protocol which follows international best practice would fast-track patients through the appropriate testing and make them ready for surgery sooner than at present (live donors would be available after 1 month, which is much quicker than the existing 3 – 6 month wait). The pathway would enable patients to be ready for transplantation sooner because the preparatory work is undertaken in a shortened timeframe. This fast-track model would be the first of its kind in the UK and would be informed by international examples of the model being implemented.

Create a single pre-emptive transplantation team: Currently each of the four specialist renal services have their own pre-emptive transplantation teams. Creating a single networked team which applies the agreed, best practice pre-emptive transplantation pathway could bring additional advantages.

These steps should increase the number of patients entering the pre-emptive transplantation pathway and therefore reduce the number of patients entering the dialysis pathway. This change is associated with both improved clinical outcomes and improved patient experience.

Intervention 10: Introduce collective purchasing (i.e. join up procurement) across South London hospitals where beneficial to do so.

Current situation:

There is currently little collaboration between hospitals who provide specialised renal services in south London when it comes to buying/ procuring things needed to support patient care. Therefore opportunities for saving money through shared, 'bulk buying' are potentially being missed.

What is the opportunity?

There is an opportunity to save money if collaborative/ joint procurement is introduced across renal services in south London: By procuring jointly, and thus buying in larger quantities, there could be increased purchasing power, allowing the negotiation of more favourable terms in procurement contracts (between the hospitals and the organisation providing the items or services in question).

Further work is required to establish the details of this intervention. Both the 'what' and the 'how' need to be considered further:

- The 'what': The hospital procurement teams and renal services involved will need to decide what items should be collaboratively purchased (e.g. drugs, equipment etc). Deciding upon the what to procure collectively will involve clinical teams and procurement teams from different hospitals across south London (primarily Epsom and St Helier, St George's, King's College and Guy's and St Thomas' Hospitals) discussing which products they will all use and the preferred choice of supplier. To some extent this activity complements the standardisation of best practice care/ provision of consistent renal services. For some items it is likely to be the case that all four specialist hospitals already separately procure from the same supplier, and for these items it should be easier and faster to combine procurement/ 'bulk buy'. Where the different hospitals currently procure different items or use different suppliers then more preliminary work will be required.
- The 'how': The hospital procurement teams and renal services across south London will need to decide how best to manage this process. For example, whether a shared 'purchasing body 'should be created and there is one contract between suppliers and this shared body, or whether multiple services/ hospitals will hold a contract with suppliers.

The direct impact on patient care that this intervention has is likely to be limited, but there will be indirect impacts:

- Collective procurement, if completed optimally, should support standardisation of services in line with best practice care. Therefore the benefits of best practice care consistently being delivered (i.e. improved patient care, patient experience and health outcomes) can be associated with collective procurement.
- If collective purchasing saves money then the money that is saved will help to bridge the gap between the growing demand for services and the growth in money available to fund these services. If this gap can be bridged by minimising wasted spend (as this intervention does) then it means this funding gap will not need to be bridged in ways that could compromise patient care.

Intervention 11: Increase nephrology input into district general hospitals (DGHs)

Current situation:
Nephrology is the specialty of medicine concerned with the kidneys. There is some variation in clinical practice between nephrology services at District General Hospitals (DGHs) across south London, Kent, Surrey and Sussex. Additionally, renal patients are not always being referred from DGHs to specialist services appropriately - sometimes patients are being referred to specialist services when they should be able to receive the care at the DGH and, on other occasions, patients are not being referred to specialists at the point when they should be.

What is the opportunity?

Increased nephrology input from specialist/ tertiary renal services into DGHs, to ensure best practice care is consistently delivered across DGHs, improve clinical practice and minimise inappropriate transfers from DGHs to specialist services.

Within this intervention, best practice will need to be agreed across clinical teams and protocols will need to be agreed and written to guide staff on processes to follow when referring from DGHs to specialist centres.

Increased nephrology input could take the form of educational teachings as well as ‘virtual clinics’ between specialist and DGH staff.

This intervention will provide a number of benefits for patients and the health economy overall:

- Increased specialist input for general nephrology services provided at district general hospitals, for dialysis patients and for those on single organ support will help to increase the knowledge and skill levels of the DGH clinical staff. This will enable patients to receive improved levels of care at DGH sites and it will also mean that patients will only be referred to specialists when they need to be at a specialist centre.
- Once patient pathways have been reviewed and best practice protocols concerning when specialist care should be accessed are agreed, then this will also result in better training for staff to have conversations with patients that provide a better outline of their best options for treatment, enhancing the quality of patient choice.

Appendix 1: Background Information

Background to the programme of work

The reason for the programme and what we are aiming for

We have some excellent, world class specialised services in south London, but there is still room for improvement in terms of quality, performance and value for money. There is also significant population growth pressure on specialised services and if we do not make changes now, then the current level of service provision will be unaffordable by 2021, given the increased demand from the population. It is recognised that there is an opportunity to deliver improved value and outcomes through closer collaboration between providers in south London.

In autumn 2016, a programme of work began to improve how effectively specialist hospital services are provided across south London. This programme of work has been labelled 'The South London Specialised Services Transformation Programme' and it sits within the context of wider Sustainability and Transformation Plan (STP) work. The programme aims to ensure that the future provision of specialised services in south London is both of high quality and financially sustainable through to 2021 and beyond.

NHS England have defined success factors for this programme as below:

Patient Experience	Quality	Value for Money
To ensure that services support patient led care. Patients, carers and families are sufficiently informed and supported to make the best choice for them regarding their treatment.	To provide optimal, safe, quality services. Services are provided in line with recognised best practice standards and recommendations made from previous quality reviews are addressed.	To bridge the gap between the rate of growth in service funding allocated and spend. This will require effective use of drugs/devices, demand management and appropriate intervention rates.
Targets: •Increase in patient satisfaction scores (to be agreed with the relevant patient representatives) •Effectiveness of shared decision making (e.g. treatment options) •Specific service group interventions, in line with best practice.	*Targets:* •All recommendations from previous quality reviews implemented and sustained •Improvement in measures on the Quality Dashboard – at patient and system level (to be agreed with the relevant patient representatives) •Tail providers and occasional practice addressed •Resilient services, in terms of workforce/physical capacity.	*Targets:* • Address the gap between funding for specialised services and projected 'do nothing' expenditure (including growth). Initial estimates suggest this gap will be circa £290m for London residents in 2021, even though funding for London providers is growing (from £3.8bn now to £4.8bn in 2021). •Proportionate demand management for each service group, so that gap is bridged.

An analysis and evaluation of current acute/ hospital specialised services provision across South East London (SEL), South West London (SWL) was undertaken – both clinical quality and financial affordability were considered within this analysis. The numbers of patients coming into south London from Kent, Surrey and Sussex to access specialised services was also analysed. Kent, Surrey and Sussex are being considered within this programme of work because approximately a third of patients that receive specialised services in south London actually live in these areas.

Background to the programme of work

People involved with this programme

A Steering Group for this programme of work was established in November 2016 and is made up of a range of key stakeholders including (not exhaustive) Trust Medical Directors from the main specialised service providers in south London, healthcare system leaders in SWL and SEL (STP Leads), and Clinical Commissioning Group (CCG) representatives from SEL and SWL. Patient representatives from SWL and SEL also sit on this Steering Group.

The programme's Steering Group meets approximately every two weeks. This Steering Group is responsible for optimising clinical service provision for a population larger than a single STP footprint, i.e. for residents of SEL *and* SWL *and* the bordering regions of Kent, Surrey and Sussex. The Steering Group is tasked with driving improvements for this health economy as a whole, rather than considering the interests of their respective organisations.

Some other roles and organisations who are involved in this programme of work include (non-exhaustive):

- The Programme team, including the Programme Director for South London Programme and NHS England's South London Medical Director
- Trust Medical Directors from provider Trusts in south London (and Kent, Surrey and Sussex where appropriate)
- South London and neighboring region Clinical Commissioning Group (CCG) Chief Officers and Chairs
- Clinical teams working within the prioritised service areas (e.g. cardiac, renal etc) within south London hospitals
- Well respected clinical experts, who are not aligned to a south London hospital
- Patient and Public groups from SEL and SWL (i.e. SEL's Patient & Public Advisory Group and SWL's Patient & Public Engagement Steering Group)
- Healthwatch organisations within south London and the neighbouring regions
- Existing groups in south London that can help to inform the programme's approach e.g. SEL Equalities Steering Group
- South London STPs Communications Director, and the relevant communications leads within Kent, Surrey and Sussex

We also want to involve the following groups:

- Service-specific patient representatives, including local patient groups (e.g. Kidney Patient Associations and current renal patients will help to shape the way forward for the renal workstream).
- Third sector national organisations aligned to the prioritised workstreams (e.g. the British Kidney Patient Association will be involved for the renal workstream)

One way of involving these groups with the work is through this patient workshop.

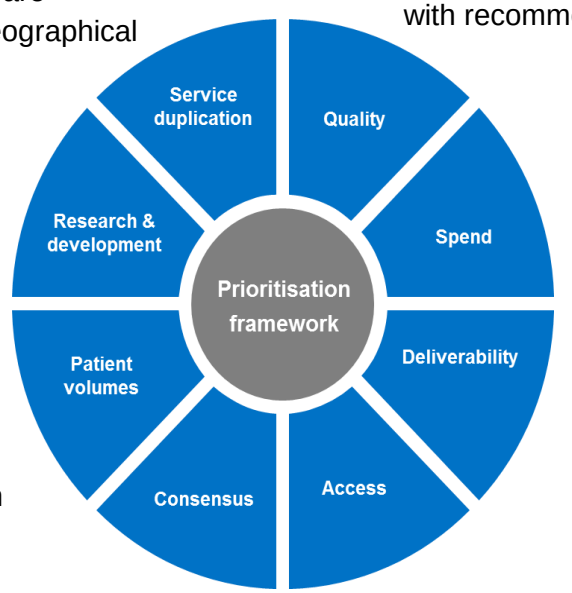
Prioritisation criteria

Deciding which specialist services were the priority areas for focus

In order to identify which clinical services it was most sensible to focus initial transformation efforts on, a prioritisation exercise was undertaken. Eight criteria against which to assess each service group were identified for use in the prioritisation exercise. These criteria are shown in the figure below. The criteria contain a mix of qualitative and quantitative, as well as clinical and non-clinical indicators.

Service duplication example: Number of sites services are provided from in close geographical area

Quality examples: Safety indicators, patient experience, staffing levels in line with recommended standards.



R&D examples: Implications considering clinical research trials e.g. patient numbers, application of research.

Spend example: Proportion of NHSE spend on service group.

Patient volumes examples: compliance with minimum volume standards, proportion volume of service users.

Deliverability examples: Cost to deliver service changes, estate implications.

Consensus examples: Identified as an STP priority, level of support for the need for change (local and national).

Access examples: Waiting times (Referral to Treatment/ RTT), travel time to access services.

These eight criteria were selected for the framework from:

- Prioritisation frameworks adopted in preceding work on specialised commissioned services which have been previously developed with patient feedback
- Best practice principles and the professional judgement of the programme team
- Consultation with staff within NHS England
- Co-designing and validating with Steering Group members.

The following five specialised service groups have been prioritised as areas of focus within the programme:

- Cardiac
- Specialist Cancer
- Neuroscience
- Paediatric services
- Renal

Background to the programme of work

What has happened so far within the renal workstream?

We thought that a sensible place to start in order to identify areas of opportunity for improvement, working towards the programme's objectives was to ask lead clinical staff that work within renal services in south London. After all, these individuals work in these services everyday. Therefore, in February 2017 a workshop was held for the renal service group, in order to identify opportunities for improvement. The Medical Directors of Epsom and St Helier University Hospitals NHS Trust, Guy's and St Thomas' NHS Foundation Trust, King's College Hospital NHS Foundation Trust and St George's University Hospitals NHS Foundation Trust were asked to identify clinical representatives from their organisations to attend the workshop. These organisations were asked to provide representatives because they are the major providers of specialised renal services for south London, Kent, Surrey and Sussex. Most of the individuals who attended this workshop were doctors (usually Clinical Leads) and Heads of Nursing within renal services at the previously mentioned hospitals. In addition to clinical representatives from these organisations participating in the workshop, Dr Neil Ashman, who is a well respected clinical expert in the field and who does not work within south London also attended (a neutral party from an organisational perspective).

The workshop ran very effectively and attendees displayed a willingness to work in collaboration. Attendees were encouraged to share their thoughts on ways in which renal services in south London and the surrounding areas could be made more sustainable – considering both short and longer term changes. Numerous opportunities (or 'interventions' as they will sometimes be referred to), were identified by clinicians at the workshop. Following the workshop the programme team went on to have many in depth discussions with appropriate stakeholders (including more renal clinicians), in order to further develop the suggested opportunities and to ensure that the details were well understood. There follow-up discussions were complete by early April.

All of the 'interventions' were then evaluated by the programme team and Steering Group to determine whether they were aligned to the programme's objectives, were suitable for implementation and whether it would be helpful to further analyse the implications of introducing each intervention by undertaking a modelling exercise. The opportunities/ interventions were also evaluated when considering the associated timeframe for the changes to take place and the time for them to deliver benefits. The assessment indicated that certain interventions could potentially be implemented within the next 12-18 months and could be viewed as 'do now' opportunities, releasing shorter term benefits such as improved value for money and/ or improved patient experience. Other interventions would take longer to implement, with benefits realisation seen in the longer term. The full evaluation process was informed by the follow-on clinical and non-clinical meetings that took place, and has been reviewed and approved by the Programme's Steering Group . This evaluation process led to a shortlist of prioritised interventions, to be considered further. This is the list of interventions that we hope to review with you.

Modelling work was undertaken for each of the shortlisted interventions to provide an idea of how things would be different if the intervention was implemented (i.e. if the proposed change took place). This modelling work provides an estimate of the financial implications of implementing each intervention, when considering the whole healthcare system.

Appendix 2: Glossary

Active renal supportive care	The term renal supportive care is used in this document to cover all aspects of conservative management, palliative care and end of life care. The term renal supportive care for patients opting not to have, or not suitable for, dialysis therapies is considered more appropriate, as opting not to have dialysis does not mean no treatment but active treatment in the form of anaemia management, biochemical management, dietary management etc.
Arteriovenous (AV) fistula	An AV fistula is a connection, made by a vascular surgeon, of an artery to a vein. Arteries carry blood from the heart to the body, while veins carry blood from the body back to the heart. Vascular surgeons specialize in blood vessel surgery. The surgeon usually places an AV fistula in the forearm or upper arm. An AV fistula causes extra pressure and extra blood to flow into the vein, making it grow large and strong. The larger vein provides easy, reliable access to blood vessels. Without this kind of access, regular hemodialysis sessions would not be possible. Untreated veins cannot withstand repeated needle insertions. They would collapse the way a straw collapses under strong suction.
Arteriovenous (AV) graft	An AV graft is a looped, plastic tube that connects an artery to a vein. A vascular surgeon performs AV graft surgery, much like AV fistula surgery, in an outpatient center or a hospital. As with AV fistula surgery, the patient may need to stay overnight in the hospital, although many patients can go home after the procedure. A health care provider uses local anesthesia to numb the area where the surgeon creates the AV graft. A patient can usually use an AV graft 2 to 3 weeks after the surgery.
CCG	NHS organisations set up by the Health and Social Care Act 2012 to organise the delivery of NHS services in England. CCGs are clinically led groups that include all of the GP groups in their geographical area. The aim of this is to give GPs and other clinicians the power to influence commissioning decisions for their patients. Clinical commissioning groups are supposed to work with patients and healthcare professionals and in partnership with local communities and local authorities. Clinical commissioning groups are responsible for arranging emergency and urgent care services within their boundaries, and for commissioning services for any unregistered patients who live in their area.
DGH	District general hospital. These services are generally major providers of hospital care in local communities. These differ to specialist (tertiary) providers who provide more specialised and complex care for patients.
eGFR	Estimated Glomerular Filtration Rate. This is a measure of the level at which the kidneys are working based on a calculation from the patient's serum creatinine, age, sex and ethnicity.
Fistula	An abnormal or surgically made passage between a hollow or tubular organ and the body surface, or between two hollow or tubular organs.
Haemodialysis (HD)	Haemodialysis is a form of treatment in which the blood is purified outside the body by passing it through a filter called the dialyser. The filter is connected to a machine which pumps the blood through the filter and controls the entire process. For patients with end stage kidney disease each dialysis session normally lasts from 3-5 hours and the sessions are almost always needed three times a week.
Multidisciplinary team (MDT) meeting	Involves the meeting of a group of professionals from one or more clinical disciplines (e.g. medical professionals, nurses, allied health) who together make decisions regarding recommended treatment of individual patients. These meetings can also include patients and their families and carers.
Patient pathway or 'pathway'	The route that a patient will take from their first contact with an NHS member of staff (usually their GP), through referral, to the completion of their treatment. It also covers the period from entry into a hospital or a Treatment Centre, until the patient leaves.
Peritoneal access	This describes the method by which the peritoneum is prepared for peritoneal dialysis using catheters.

Renal services described for non-renal specialists

Peritoneal dialysis (PD)	Peritoneal dialysis is a treatment of kidney failure in which blood purification takes place using the patient's own peritoneum as the membrane. Bags of dialysis fluid containing glucose and various other substances are drained in and out of the peritoneal cavity via a PD catheter. This may be in the form of Continuous Ambulatory Peritoneal Dialysis (CAPD) or Automated Peritoneal Dialysis (APD).
Primary care	Primary health care is the first point of contact for health care for most people. It is mainly provided by GPs (general practitioners) but community pharmacists, opticians and dentists are also primary healthcare providers.
Protocol	The official procedure or system of rules governing a certain process to be followed (e.g. the set of actions and their order in which a doctor needs to deliver an operation to achieve the best outcome for patient minimising the risks of death)
Provider	Usually refers to a hospital. There are different types of providers (hospitals). Some will provider secondary care, which is sometimes referred to as 'hospital and community care', can either be planned (elective) care such as a cataract operation, or urgent and emergency care such as treatment for a fracture. Tertiary care refers to highly specialised treatment such as neurosurgery, transplants and secure forensic mental health services.
Renal high dependency unit	Renal HDU is different to general HDU as the patients have single (not multiple) organ failure and the training requirements to care for these patients are quite distinct. Dialysis for acute kidney injury (AKI) often takes place in a renal HDU.
Rota	Staff schedule or roster. The allocation and assignment of staff to work.
RTT	Abbreviation for 'Referral to Treatment'. The NHS Constitution gives patients the right to access services within maximum waiting times, or for the NHS to take all reasonable steps to offer a range of suitable providers if this is not possible. The NHS Constitution sets out that patients should wait no longer than 18 weeks from GP referral to treatment.
STP	STPs are five-year plans covering all aspects of NHS spending in England, as well as focusing on better integration with social care and other local authority services. The scope of the STPs is to address population needs in each assigned geographical 'footprint' by improving quality and developing new models of care; improving health and wellbeing; and improving efficiency of services in a financially sustainable way. Forty-four areas have been identified as the geographical 'footprints' on which the plans are based, with an average population size of 1.2 million. Most STP leaders come from clinical commissioning groups (CCGs) and NHS trusts or foundation trusts, but a small number come from local government.
Tertiary provider/ hospital	A tertiary provider (or centre) is a hospital that provides specialist patient care. They will have staff that are specialist in their field and specialist equipment that is not available at all hospitals. Patients will be referred to a tertiary centre if they require specialist services. Patients care be referred to a tertiary centre or service from a smaller, less equipped hospital (e.g. a district general) or directly from a GP.
Transplantation	This is the replacement of an organ in the body by another person's organ. About 40% of patients with established renal failure are suitable for transplantation. Pancreatic transplants will treat diabetes which may be the cause of the renal failure. By doing a simultaneous kidney and pancreas transplant both the diabetes and the renal disease can both be treated.
Vascular access	This describes a method of gaining entry to the bloodstream to allow for haemodialysis. Methods include fistulas, catheters or grafts. Establishing good access is crucial to the success of dialysis.
Venous catheter	Also called a central line, is a long, thin, flexible tube used to give medicines, fluids, nutrients, or blood products over a long period of time, usually several weeks or more. A catheter is often inserted in the arm or chest through the skin into a large vein.