Renal replacement therapy services

NICE quality standard

Draft for consultation

June 2014

Introduction

This quality standard covers renal replacement therapy services for kidney failure in adults, young people and children. It is a partial update of Chronic Kidney Disease (Quality Standard 5), specifically statements 11 to 15. Statements 1 to 10 within Chronic Kidney Disease (Quality Standard 5) are not affected by this update and are still current. The links between this quality standard and the chronic kidney disease quality standard will be considered following the consultation with consideration given to have a single amalgamated quality standard. For more information see the topic overview.

Why this quality standard is needed

Renal replacement therapy is a life-long treatment for patients with end-stage kidney disease. Services for renal replacement therapy in adults, young people and children include the following treatment choices:

- conservative care and symptom control
- dialysis (either haemodialysis or peritoneal dialysis)
- kidney transplant (from a living or cadaveric donor).

Two main types of dialysis are available, haemodialysis and peritoneal dialysis. The main factors that determine the choice of dialysis include patient preference to suit their lifestyle, local availability of treatment within a service and clinical contraindications. Kidney transplantation is not suitable for all patients receiving dialysis.

The quality standard is expected to contribute to improvements in the following outcomes:

- preventing people from dying prematurely
- enhancing quality of life for people with long-term conditions
- ensuring that people have a positive experience of care
- treating and caring for people in a safe environment and protecting them from avoidable harm.

How this quality standard supports delivery of outcome frameworks

NICE quality standards are a concise set of prioritised statements designed to drive measurable quality improvements within a particular area of health or care. They are derived from high-quality guidance, such as that from NICE or other sources accredited by NICE. This quality standard, in conjunction with the guidance on which it is based, should contribute to the improvements outlined in the following outcomes framework published by the Department of Health:

- NHS Outcomes Framework 2014/15

Table 1 show the outcomes, overarching indicators and improvement areas from the frameworks that the quality standard could contribute to achieving.

Table 1 NHS Outcomes Framework 2014/15

Domain	Overarching indicators and improvement areas
1 Preventing people from dying prematurely	***Overarching indicator*** 1a Potential Years of Life Lost (PYLL) from causes considered amenable to healthcare i Adults ii Children and young people 1b Life expectancy at 75 i Males ii Females
2 Enhancing quality of life for people with long-term conditions	***Overarching indicator*** 2 Health-related quality of life for people with long-term conditions** ***Improvement areas*** **Ensuring people feel supported to manage their condition** 2.1 Proportion of people feeling supported to manage their condition **Reducing time spent in hospital by people with long-term conditions** 2.3 i Unplanned hospitalisation for chronic ambulatory care sensitive conditions (adults)
4 Ensuring that people have a positive experience of care	***Overarching indicator*** 4b Patient experience of hospital care ***Improvement areas***

	Improving hospitals' responsiveness to personal needs 4.2 Responsiveness to in-patients' personal needs **Improving people's experience of accident and emergency services** 4.3 Patient experience of A&E services
5 Treating and caring for people in a safe environment and protecting them from avoidable harm	***Overarching indicator*** 5a Patient safety incidents reported 5b Safety incidents involving severe harm or death 5c Hospital deaths attributable to problems in care ***Improvement areas*** **Reducing the incidence of avoidable harm** 5.4 Incidence of medication errors causing serious harm
Alignment across the health and social care system ** Indicator complementary with Adult Social Care Outcomes Framework (ASCOF)	

Coordinated services

The quality standard for renal replacement therapy services specifies that services should be commissioned from and coordinated across all relevant agencies encompassing the whole renal replacement therapy service care pathway. A person-centred, integrated approach to providing services is fundamental to delivering high-quality care to people receiving renal replacement therapy services.

The Health and Social Care Act 2012 sets out a clear expectation that the care system should consider NICE quality standards in planning and delivering services, as part of a general duty to secure continuous improvement in quality. Commissioners and providers of health and social care should refer to the library of NICE quality standards when designing high-quality services. Other quality standards that should also be considered when choosing, commissioning or providing a high-quality renal replacement therapy service are listed in 'Related quality standards'.

Training and competencies

The quality standard should be read in the context of national and local guidelines on training and competencies. All healthcare professionals involved in assessing, caring for and treating people receiving renal replacement therapy should have sufficient and appropriate training and competencies to deliver the actions and interventions described in the quality standard.

Role of families and carers

Quality standards recognise the important role families and carers have in supporting people receiving renal replacement therapy. If appropriate, healthcare professionals should ensure that family members and carers are involved in the decision-making process about investigations, treatment and care.

List of quality statements

Statement 1. People with CKD requiring renal replacement therapy are supported to receive a pre-emptive kidney transplant before they need dialysis, if they are medically suitable.

Statement 2. People with CKD on dialysis are supported to receive a kidney transplant, if they are medically suitable.

Statement 3. People with established kidney failure start dialysis with a functioning arteriovenous fistula or peritoneal dialysis catheter in situ.

Statement 4. People on long-term dialysis receive the best possible therapy, incorporating regular and frequent application of dialysis and ideally home-based or self-care dialysis.

Statement 5. People with CKD receiving haemodialysis or training for home therapies who are eligible for transport, have access to an effective and efficient transport service.

Statement 6. Specialist renal centres have ongoing individualised education programmes for people preparing for or receiving renal replacement therapy with their families or carers.

Statement 7. People who have who have a suspected acute rejection episode have a timely transplant renal biopsy carried out and reported on before treating the episode.

Statement 8. People receiving haemodialysis have their vascular access monitored and maintained in line with local protocols.

Questions for consultation

Questions about the quality standard

Question 1 Does this draft quality standard accurately reflect the key areas for quality improvement?

Question 2 If the systems and structures were available, do you think it would be possible to collect the data for the proposed quality measures?

Question 3 For each quality statement what do you think could be done to support improvement and help overcome barriers?

Questions about the individual quality statements

Question 4 For draft quality statement 7: Within what timeframe should the person who has a suspected acute rejection episode have a timely transplant kidney biopsy carried out and reported on before treating the episode? Please specify a timeframe to aid clarity and measurement to this statement?

Question 5 For draft quality statement 8: What are the most important procedures and processes to ensure effective monitoring and maintenance of vascular access and to prevent complications?

Quality statement 1: Transplantation – pre-emptive

Quality statement

People with CKD requiring renal replacement therapy are supported to receive a pre-emptive kidney transplant before they need dialysis, if they are medically suitable.

Rationale

Evidence shows that transplant outcomes are better for people who have not been on dialysis (that is, pre-emptive transplantation) than those who have, and that transplant survival is negatively influenced by the duration of dialysis before transplantation.

It is recommended that patients with progressive deterioration in kidney function for whom transplantation is an option should be placed on the national transplant list within 6 months of their anticipated dialysis start date. Pre-emptive transplantation should be the treatment of choice for all suitable patients whenever a living donor is available.

Quality measures

Structure

a) Evidence of local arrangements to ensure that people with CKD requiring renal replacement therapy are supported to receive a pre-emptive kidney transplant before they need dialysis, if they are medically suitable.

Data source: Local data collection. The UK Renal Registry collects data on the date of assessment for transplant suitability and the date of first established renal failure treatment.

b) Evidence of local arrangements to ensure that people with progressive CKD have their suitability for kidney transplantation assessed at the earliest opportunity.

Data source: Local data collection. The UK Renal Registry collects data on the date of assessment for transplant suitability and the date of first established renal failure treatment.

Process

Proportion of people with CKD requiring renal replacement therapy who are medically suitable, receiving a pre-emptive kidney transplant before they need dialysis.

Numerator – the number in the denominator receiving a pre-emptive kidney transplant before they need dialysis.

Denominator – the number of people medically suitable for pre-emptive kidney transplantation.

Data source: Local data collection. The Health and Social Care Information Centre Hospital Episode Statistics contains data on kidney transplantation. The Office of population censuses and survey classification of surgical operations and procedures (4th revision) codes for this are M01 Transplantation of kidney (subcategories 1–5, 8, 9) and M17 Interventions associated with transplantation of kidney (subcategories 1–5, 8, 9), which includes live kidney donor screening. The UK Renal Registry collects data on the date of transplant and date of first established renal failure treatment. Also contained within The Renal Association's Clinical practice guidelines: assessment of the potential kidney transplant recipient, audit criterion 4, and planning, initiating and withdrawal of renal replacement therapy, audit measure 4.

What the quality statement means for service providers, healthcare professionals, and commissioners

Service providers (Hospitals and specialist renal centres) ensure collaboration to support people with CKD requiring renal replacement therapy to receive pre-emptive kidney transplantation before they need dialysis, if they are medically suitable.

Healthcare professionals ensure they assess people with CKD requiring renal replacement therapy for pre-emptive kidney transplantation at the earliest opportunity and support them to receive a transplant before they need dialysis, if they are medically suitable.

Commissioners (Clinical Commissioning Groups and NHS England through specialised service area teams) ensure they collaboratively commission services that support people with CKD requiring renal replacement therapy to receive pre-emptive kidney transplantation before they need dialysis, if they are medically suitable.

What the quality statement means for patients, service users and carers

People with CKD who have kidney failure are given support to receive a kidney transplant before they need dialysis if it is a suitable option for them.

Source guidance

- The Renal Association (2011) Clinical practice guideline: assessment of the potential kidney transplant recipient, recommendation 1.3.

Definitions of terms used in this quality statement

Pre-emptive transplantation

Pre-emptive transplantation may be from a cadaveric or living donor; living donor is preferred.

[Adapted from The Renal Association (2011) Clinical practice guideline: assessment of the potential kidney transplant recipient]

People with CKD who are medically suitable for transplantation

Medically suitable patients should include those whose transplant workup has been delayed by poor access to appropriate investigations such as coronary angiography.

[Adapted from The Renal Association (2011) Clinical practice guideline: assessment of the potential kidney transplant recipient]

Quality statement 2: Transplantation – on dialysis

Quality statement

People with CKD on dialysis are supported to receive a kidney transplant, if they are medically suitable.

Rationale

Transplant survival has been shown to be negatively influenced by the duration of dialysis before transplantation. Therefore, it is important that people who are on dialysis continue to be supported to receive a kidney transplant if it is a medically suitable option for them. This includes people for whom pre-emptive transplant was not suitable and people starting dialysis in an unplanned way.

Quality measures

Structure

a) Evidence of local arrangements to ensure that people with CKD on dialysis are supported to receive a kidney transplant, if they are medically suitable.

Data source: The UK Renal Registry collects data on the date of assessment for transplant suitability and the date of first established renal failure treatment. Transplant status is also contained within The Renal Association's Clinical practice guideline: assessment of the potential kidney transplant recipient, audit criterion 6.

b) Evidence of local arrangements to ensure that people with CKD on dialysis have their suitability for kidney transplantation assessed at the earliest opportunity.

Data source: The UK Renal Registry collects data on the date of assessment for transplant suitability and the date of first established renal failure treatment. Transplant status is also contained within The Renal Association's Clinical practice guideline: assessment of the potential kidney transplant recipient, audit criterion 6.

Process

a) Proportion of people with CKD starting dialysis in a planned way who were medically suitable and active on the kidney transplant waiting list for 6 months or more before starting dialysis.

Numerator – the number in the denominator active on the kidney transplant waiting list for 6 months or more at the start of dialysis.

Denominator – the number of people with CKD starting dialysis in a planned way and medically suitable for transplantation.

b) Proportion of people receiving dialysis which was started in an unplanned way who are medically suitable and active on the kidney transplant waiting list within 12 months of starting dialysis.

Numerator – the number in the denominator active on the kidney transplant waiting list within 12 months of starting dialysis.

Denominator – the number of people receiving dialysis which was started in an unplanned way, medically suitable for kidney transplantation.

Data source: The UK Renal Registry collects data on transplant waiting list status (including date) and renal treatment modality. Also contained within The Renal Association's Clinical practice guideline: assessment of the potential kidney transplant recipient, audit criteria 3 and 5.

Outcome

Proportion of people with CKD previously or currently on dialysis who are medically suitable for, and who receive, a kidney transplant.

Numerator – the number in the denominator receiving a kidney transplant.

Denominator – the number of people with CKD previously or currently on dialysis, medically suitable for a kidney transplant.

Data source: The Health and Social Care Information Centre Hospital Episode Statistics contains data on kidney transplantation. The Office of population censuses and survey classification of surgical operations and procedures (4th revision) codes for this are M01 Transplantation of kidney (subcategories 1–5, 8, 9) and M17 Interventions associated with transplantation of kidney (subcategories 1–5, 8, 9), which includes live kidney donor screening. The UK Renal Registry collects data on the date of transplant and renal treatment modality.

What the quality statement means for service providers, healthcare professionals, and commissioners

Service providers (Specialist renal centres) ensure that they support people with CKD on dialysis to receive a kidney transplant, if they are medically suitable.

Healthcare professionals ensure they assess people with CKD on dialysis for kidney transplantation at the earliest opportunity and support them to receive a transplant, if they are medically suitable.

Commissioners (NHS England through specialised services area teams) ensure they commission services that support people with CKD on dialysis to receive a kidney transplant, if they are medically suitable.

What the quality statement means for patients, service users and carers

People with CKD on dialysis are given support to receive a kidney transplant at the earliest opportunity if it is a suitable option for them.

Source guidance

- The Renal Association (2011) Clinical practice guideline: assessment of the potential kidney transplant recipient, recommendation 1.3.

Quality statement 3: Dialysis access preparation

Quality statement

People with established kidney failure start dialysis with a functioning arteriovenous fistula or peritoneal dialysis catheter in situ.

Rationale

Dialysis access is an increasingly important marker of clinical care. Arteriovenous fistula is regarded as the best form of vascular access for people receiving haemodialysis. This is because it lasts longer, needs less maintenance and carries less risk of complications than other types of vascular access. A working fistula should be the aim for people starting haemodialysis treatments whenever this is possible.

A peritoneal dialysis catheter should be in situ, whenever possible, before starting peritoneal dialysis.

Quality measures

Structure

Evidence of local arrangements to ensure that catheter insertion for peritoneal dialysis is performed at least 2 weeks before dialysis starts or, where clinically indicated, a functioning arteriovenous fistula is in situ when people start haemodialysis.

Data source: Local data collection.

Process

a) Proportion of people starting long-term haemodialysis more than 90 days after referral who start dialysis with a functioning arteriovenous fistula or other vascular access with documented valid clinical reasons for the need for non-fistula access.

Numerator – the number in the denominator with a functioning arteriovenous fistula or other vascular access with documented valid clinical reasons for the need for non-fistula access.

Denominator – the number of people starting long-term haemodialysis more than 90 days after referral.

Data source: Local data collection.

b) Proportion of people starting long-term haemodialysis within 90 days of referral with intravenous vascular access who have a planned date for arteriovenous fistula surgery or other permanent vascular access with documented clinical reasons for the need for non-fistula access.

Numerator – the number in the denominator with a planned date for arteriovenous fistula surgery or other permanent vascular access with documented clinical reasons for the need for non-fistula access.

Denominator – the number of people starting long-term haemodialysis within 90 days of referral with intravenous vascular access.

Data source: Local data collection

c) Proportion of people who have a peritoneal catheter inserted at least 2 weeks before starting peritoneal dialysis.

Numerator – the number in the denominator with a peritoneal catheter insertion performed at least 2 weeks before starting dialysis.

Denominator – the number of people starting peritoneal dialysis.

Data source: Local data collection

Outcome

a) People starting haemodialysis treatment who start dialysis with a functioning arteriovenous fistula.

Consideration should be given to the audit standard of 65% for this outcome in The Renal Association's Clinical practice guideline: Vascular access for haemodialysis.

Data source: Local data collection

b) People on haemodialysis treatment who receive dialysis via a functioning arteriovenous fistula (including people who started dialysis with other vascular access who now have a functioning arteriovenous fistula).

Consideration should be given to an audit standard of 75% for this outcome for this outcome in The Renal Association's Clinical practice guideline: Vascular access for haemodialysis.

Data source: Local data collection

c) Staphylococcus aureus (MRSA and MSSA) bacteraemia rate in people under the care of renal services.

Data source: Local data collection

d) Peritonitis rate in people receiving peritoneal dialysis.

Data source: Local data collection

e) Other dialysis-associated infection rates.

Data source: Local data collection

What the quality statement means for service providers, healthcare professionals, and commissioners

Service providers (Specialist renal centres) ensure that systems are in place to perform catheter insertion at least 2 weeks before people start peritoneal dialysis and, where clinically indicated, to establish a functioning arteriovenous fistula in people starting (and receiving if late referral) haemodialysis.

Healthcare professionals ensure they perform catheter insertion at least 2 weeks before people start peritoneal dialysis and establish a functioning arteriovenous fistula in people starting (and receiving if late referral) haemodialysis, where clinically indicated.

Commissioners (NHS England through specialised services area teams) ensure services perform catheter insertion at least 2 weeks before people start peritoneal dialysis and, where clinically indicated, services establish a functioning arteriovenous fistula in people starting (and receiving if late referral) haemodialysis.

What the quality statement means for patients, service users and carers

People with CKD starting dialysis are prepared in advance either by connecting an artery to a vein (arteriovenous fistula) usually in the forearm, or by inserting a tube (a catheter) into the abdomen, depending on the situation and type of dialysis.

Source guidance

- The Renal Association (2011) Clinical practice guideline: vascular access for haemodialysis, recommendations 1.1 and 1.2.
- The Renal Association (2009) Clinical practice guideline: peritoneal access, recommendation 2.1.

Quality statement 4: Best possible dialysis

Quality statement

People on long-term dialysis receive the best possible therapy, incorporating regular and frequent application of dialysis and ideally home-based or self-care dialysis.

Rationale

Appropriate treatments should be available to all people receiving dialysis to ensure patient choice, irrespective of where they live, so that they can select the treatment that best meets their clinical and lifestyle needs.

Decisions around best possible dialysis should be based on current evidence and give patients a choice of treatments, and where appropriate, peritoneal dialysis as the agreed option.

All patients should be encouraged to perform home-based dialysis if possible. People who are not able to have home-based dialysis should be actively involved in their treatment and encouraged to perform as much self-care dialysis as possible. Research suggests that given appropriate education and choice, many people would choose home-based dialysis (peritoneal dialysis or home haemodialysis) in preference to hospital-based dialysis. However, this is not reflected in the actual number of patients receiving dialysis at home.

Quality measures

Structure

a) Evidence of local arrangements to ensure that people on long-term dialysis receive the best possible therapy, incorporating regular and frequent application of dialysis and ideally home or self-care dialysis.

Data source: Local data collection.

b) Evidence of local arrangements to ensure that people on long-term dialysis are reviewed regularly for the best possible therapy.

Data source: Local data collection.

Process

a) Proportion of people on long-term dialysis who dialyse at home or perform self-care dialysis.

Numerator – the number in the denominator dialysing at home or performing self-care dialysis.

Denominator – the number of people on long-term dialysis.

Data source: Local data collection. The UK Renal Registry collects data on renal treatment modality and renal dialysis episodes per week.

b) Proportion of people on long-term haemodialysis who receive either 3 sessions of haemodialysis per week of at least 4 hours duration or more frequent haemodialysis.

Numerator – the number in the denominator receiving either 3 sessions of haemodialysis per week of at least 4 hours duration or more frequent haemodialysis.

Denominator – the number of people on long-term haemodialysis.

Data source: Local data collection. The UK Renal Registry collects data on renal treatment modality and renal dialysis episodes per week.

c) Proportion of people on peritoneal dialysis who are on automated peritoneal dialysis.

Numerator – the number in the denominator on automated peritoneal dialysis.

Denominator – the number of people on peritoneal dialysis.

Data source: Local data collection. The UK Renal Registry collects data on renal treatment modality and renal dialysis episodes per week.

What the quality statement means for service providers, healthcare professionals, and commissioners

Service providers (Specialist renal centres) ensure that systems are in place to provide people on long-term dialysis with the best possible therapy, incorporating regular and frequent application of dialysis and ideally home-based or self-care dialysis.

Healthcare professionals ensure they review people on long-term dialysis, offer the best possible therapy, incorporating regular and frequent application of dialysis, and support them to receive home-based or self-care dialysis if possible.

Commissioners (NHS England through specialised services area teams) ensure they commission services that support people on long-term dialysis to receive the best possible therapy, incorporating regular and frequent application of dialysis and ideally home-based or self-care dialysis.

What the quality statement means for patients, service users and carers

People on long-term dialysis receive the best possible care, which includes regular and frequent dialysis sessions that are carried out at home, if possible, or with the person's involvement (self-care dialysis) in a dialysis unit.

Source guidance

- The Renal Association (2009) Clinical practice guideline: planning, initiating and withdrawal of renal replacement therapy, recommendations 3.5 and 3.6.
- The Renal Association (2009) Clinical practice guideline: haemodialysis, recommendations 5.1 and 5.4.
- The Renal Association (2010) Clinical practice guideline: peritoneal dialysis, recommendations 3.2, 3.3 (rationale) and 4.2.
- Guidance on home compared with hospital haemodialysis for patients with end-stage renal failure. (NICE technology appraisal guidance 48), recommendation 1.1.
- Peritoneal dialysis (NICE clinical guideline 125), recommendations 1.1.9 and 1.1.11.

Quality statement 5: Patient transport

Quality statement

People receiving haemodialysis or training for home therapies who are eligible for transport, have access to an effective and efficient transport service.

Rationale

Patient transport is an essential part of patient experience with people receiving hospital- or satellite-based haemodialysis which requires frequent travel between their home and the treatment centre. Poor transport can undermine good dialysis care and can have a major impact on a person's quality of life. This also applies to people who are training for home therapies and may need to travel to a regional renal centre.

Patient transport is frequently cited as an area that needs improving by people receiving haemodialysis and wide variations in journey and waiting times are reported, for example, journeys home following dialysis sessions can involve multiple drop-offs.

Quality measures

Structure

a) Evidence of local transport arrangements to ensure that people with CKD receiving haemodialysis or training for home therapies who are eligible for transport, have access to an effective and efficient transport service.

Data source: Local data collection.

b) Evidence of local arrangements to act upon patient satisfaction results from the latest national kidney transport audit.

Data source: The patient transport audit (published in 2008, 2010 and 2012) examines patient experiences of travelling to a specialist renal unit for treatment, including wait times, journey times and whether transport was free. Commissioners and providers of kidney transport services and patients may use these reports to assess and benchmark their service against other providers.

Process

a) Proportion of people with CKD training for home therapies, who are eligible for and require transport, who have access to effective and efficient transport.

Numerator – the number in the denominator with access to effective and efficient transport.

Denominator – the number of people training for home therapies eligible for and requiring transport.

Data source: The patient transport audit (published in 2008, 2010 and 2012) examines, at a unit level, the provision of patient transport services. This includes providing published criteria describing eligibility for free and appropriate transport, and regular review of patients' needs. The UK Renal Registry collects data on patient transport including the date and time of pick up, the date and time the patient is taken off the machine and the date and time of return pick up.

b) Proportion of people receiving haemodialysis in a specialist renal unit or hospital who have been reviewed for transport eligibility in the previous 6 months.

Numerator – the number in the denominator reviewed for transport eligibility in the previous 6 months.

Denominator – the number of people receiving haemodialysis in a specialist renal unit or hospital.

Data source: The patient transport audit (published in 2008, 2010 and 2012) examines, at a unit level, the provision of patient transport services. This includes providing published criteria describing eligibility for free and appropriate transport, and regular review of patients' needs. The UK Renal Registry collects data on patient transport including the date and time of pick up, the date and time the patient is taken off the machine and the date and time of return pick up.

c) Proportion of people receiving haemodialysis in a specialist renal unit or hospital, who are eligible for and require transport, and who are collected from home within 30 minutes of their allotted time.

Numerator – the number in the denominator collected from home within 30 minutes of their allotted time.

Denominator – the number of people receiving haemodialysis in a specialist renal unit or hospital, eligible for and requiring transport.

Data source: The patient transport audit (published in 2008, 2010 and 2012) examines, at a unit level, the provision of patient transport services. This includes providing published criteria describing eligibility for free and appropriate transport, and regular review of patients' needs. The UK Renal Registry collects data on patient transport including the date and time of pick up, the date and time the patient is taken off the machine and the date and time of return pick up.

d) Proportion of people receiving haemodialysis in a specialist renal unit or hospital, who are eligible for and require transport, and who are collected to return home within 30 minutes of finishing dialysis.

Numerator – the number in the denominator collected to return home within 30 minutes of finishing dialysis.

Denominator – the number of people receiving haemodialysis in a specialist renal unit or hospital, eligible for and requiring transport.

Data source: The patient transport audit (published in 2008, 2010 and 2012) examines, at a unit level, the provision of patient transport services. This includes providing published criteria describing eligibility for free and appropriate transport, and regular review of patients' needs. The UK Renal Registry collects data on patient transport including the date and time of pick up, the date and time the patient is taken off the machine and the date and time of return pick up. Also contained within The Renal Association's Clinical practice guideline: haemodialysis, audit measure 2.

Outcome

Patient satisfaction.

Data source: Local data collection. The patient transport audit (published in 2008, 2010 and 2012).

What the quality statement means for service providers, healthcare professionals, and commissioners

Service providers (Transport service providers) ensure they provide effective and efficient transport for people receiving haemodialysis in a specialist renal unit or hospital or training for home therapies, who are eligible for transport.

Service providers (Specialist renal units and hospitals) ensure that haemodialysis treatments and training for home therapies take place on time so that transport schedules can be upheld.

Healthcare professionals assess people's eligibility for transport if they are receiving haemodialysis in a specialist renal unit or hospital or training for home therapies, and review this if their circumstances change. They also ensure that haemodialysis treatments, and training for home therapies, take place on time so that transport schedules are upheld.

Commissioners (Clinical Commissioning Groups) commission services that provide effective and efficient transport for eligible people receiving haemodialysis in a specialist renal unit or hospital, or training for home therapies. They review local transport arrangements, including the use of ambulances, taxis, volunteer drivers, and other private transport providers, and determine whether appropriate systems and processes are in place, and if any service redesign is necessary.

What the quality statement means for patients, service users and carers

People receiving dialysis or training for home therapies in a specialist renal unit or hospital, who are entitled to help with transport are provided with efficient and reliable transport to and from the unit or hospital.

Source guidance

- The Renal Association (2009) Clinical practice guideline: haemodialysis, recommendations 1.4 and 9.2.

Equality and diversity considerations

Significant patient travel problems may arise for people receiving hospital- or satellite-based haemodialysis which requires frequent travel between their home and the treatment centre.

Quality statement 6: Education programmes

Quality statement

Specialist renal centres have ongoing individualised education programmes for people preparing for or receiving renal replacement therapy and their families or carers.

Rationale

Renal education programmes can improve patient knowledge, their understanding of the condition and can help people to choose the treatment options that are most suitable for them. The benefits of pre-dialysis education include improved well-being and physical functioning, as well as positively contributing to better planning and initiation of dialysis, improved vascular access, delaying the need for starting dialysis and an increased likelihood of patients choosing self-care. Evidence also suggests that ongoing education is important to ensure that these benefits are maintained and that people's involvement (including full participation of families and carers) in their care and treatment choices is optimised. This includes people who initiate dialysis in an unplanned way.

Quality measures

Structure

Evidence that specialist renal centres have ongoing individualised education programmes for people preparing for or receiving renal replacement therapy and their families or carers.

Data source: Local data collection.

(a) Proportion of specialist renal centres who have ongoing individualised education programmes for people preparing for renal replacement therapy and their families or carers.

Numerator – the number in the denominator who have an individualised education programme that is also available to families and carers.

Denominator – the number of people who are preparing for renal replacement therapy.

Data source: Local data collection.

(b) Proportion of specialist renal centres who have ongoing individualised education programmes for people receiving renal replacement therapy and their families or carers.

Numerator – the number in the denominator who have an individualised education programme that is also available to families and carers.

Denominator – the number of people who are receiving renal replacement therapy.

Data source: Local data collection.

Outcome

Patient satisfaction feedback from people preparing for or receiving renal replacement therapy (and their families or carers) about education programmes on renal replacement therapy in specialist renal centres.

Data source: Local data collection.

What the quality statement means for service providers, healthcare professionals and commissioners

Service providers (Specialist renal centres) ensure that they provide ongoing individualised education programmes to people both preparing for renal replacement therapy and people receiving renal replacement therapy with their families or carers.

Healthcare professionals ensure that ongoing individualised education programmes are delivered to people both preparing for renal replacement therapy and people receiving renal replacement therapy with their families or carers.

Commissioners (NHS England through specialised services area teams) ensure that ongoing individualised education programmes are in place with clear referral pathways for people preparing for or receiving renal replacement therapy with their families or carers.

What the quality statement means for patients, service users and carers

People who are preparing for or receiving renal replacement therapy and also people who start dialysis unexpectedly and their families and carers are offered an ongoing education course to improve their knowledge and understanding of their condition, and to help them choose the most appropriate options for treatment. The course will be adapted to the person's situation and preferences for learning, and will continue to be available after treatment has started.

Source guidance

- The Renal Association (2009) Clinical practice guideline: planning, initiating and withdrawal of renal replacement therapy, recommendations 4.1, 4.2 and 4.3.

Definitions of terms used in this quality statement

Education programmes

Education programmes are aimed at improving patient knowledge, understanding of their condition and helping to choose among the treatment options. The education programme should be tailored to the needs of the individual and be designed to support patient choice.

A range of teaching methods can be used within one session in order to allow learning to take place irrespective of the learning style. The information should be specifically designed to support decision-making regarding treatment options. This should be relevant to the person, their disease stage and treatment options available to them with the method, scale, pace and scope of the delivery being suited to the individual's learning style, capacity and preferences.

A variety of approaches should be available. These include:

- individual conversations
- group work
- written materials
- DVD/CDs and internet resources
- decision making aids

- access to expert patients appropriately trained.

The education programme should be offered to people who are preparing for renal replacement therapy (people with severe CKD (stage 5 and progressive stage 4)), together with their families and carers. The programme should include provision for the education of people who present late, and initiate dialysis in an unplanned fashion, together with their families and carers.

The programme should also include provision of continuing education for people receiving dialysis, together with their families and carers, with the aims of reviewing the original choice made by the patient, optimising patient involvement in their own care, improving treatment adherence, and fostering good communication and collaborative relationships with caregivers.

[Adapted from The Renal Association (2009) Clinical practice guideline: planning, initiating and withdrawal of renal replacement therapy, recommendations 4.1, 4.2 and 4.3 including rationale]

Equality and diversity considerations

Information should be provided in an accessible format (particularly for people with physical, sensory or learning disabilities and those who do not speak or read English) and educational materials should be translated where appropriate.

Significant patient travel problems may arise if children and young people need to travel to specialist renal centres for tailored education programmes. Education may be needed in an online format to reduce the number of appointments.

Quality statement 7: Transplantation – access to a specialist histopathology service

Quality statement

People who have who have a suspected acute rejection episode have a timely transplant kidney biopsy carried out and reported on before treating the episode.

Rationale

People who have had a kidney transplant who are suspected of having an acute rejection episode should have a biopsy as soon as is considered appropriate or safe in order to inform treatment decisions. It is important that treatment for acute rejection is started as soon as possible and is guided by the transplant biopsy results. This relies on rapid access to a specialist histopathology service so that the transplant dysfunction can be established.

Quality measures

Structure

Evidence of local arrangements to ensure that people who have a suspected acute rejection episode have a timely transplant kidney biopsy carried out and reported on before treating the episode.

Data source: Local data collection.

Process

Proportion of people who have a suspected acute rejection episode have a timely transplant kidney biopsy carried out and reported on before treating the episode.

Numerator – the number in the denominator who have a timely transplant kidney biopsy carried out and completed before treating the episode.

Denominator – the number of people who have a suspected acute rejection episode.

Data source: Local data collection.

What the quality statement means for service providers, healthcare professionals and commissioners

Service providers (Hospitals and specialist renal centres) ensure that people who have a suspected acute rejection episode have a timely transplant kidney biopsy carried out and reported on before treating the episode.

Healthcare professionals ensure that a timely transplant kidney biopsy is carried out and reported on for people who have a suspected acute rejection episode before treating the episode.

Commissioners (NHS England through specialised services area teams and clinical commissioning groups) ensure that they commission services for people who have a suspected acute rejection episode to receive a timely transplant kidney biopsy and this is reported on before treating the episode.

What the quality statement means for patients, service users and carers

People who have had a kidney transplant who may have had an 'acute transplant rejection' (which is when the body's immune system attacks the donated kidney) have a procedure called a kidney biopsy to remove, test and report on a small sample of the kidney before treatment for transplant rejection is started.

Source guidance

- The Renal Association (2011) Clinical practice guideline: post-operative care of the kidney transplant recipient, recommendation 4.1.

Question for consultation

Within what timeframe should the person who has a suspected acute rejection episode have a timely transplant kidney biopsy carried out and reported on before treating the episode? Please specify a timeframe to aid clarity and measurement to this statement?

Quality statement 8: Haemodialysis access - Maintaining vascular access

Quality statement

People receiving haemodialysis have their vascular access monitored and maintained in line with local protocols.

Rationale

Maintaining and monitoring vascular access is essential to ensure that it works well for as long as possible and to help prevent infection and other complications. Urgent access related complications should be treated in line with locally agreed protocols by the multidisciplinary team.

Providing and maintaining good quality vascular access can however be difficult. People receiving haemodialysis are particularly prone to infection because their immune systems are impaired and they have frequent invasive treatment, so monitoring and maintaining their vascular access is important to reduce the risk of infection and other complications. It is also allows early recognition of when access is failing, which is crucial to inform appropriate intervention and planning for further access surgery in a timely way.

Quality measures

Structure

Evidence of local arrangements to ensure that people receiving haemodialysis have their vascular access monitored and maintained in line with local protocols.

Data source: Local data collection.

Structure

Evidence of a protocol to ensure that complications of vascular access are recorded and regularly reviewed within the unit.

Data source: Local data collection.

Process

Proportion of people who receive dialysis who have their vascular access monitored and maintained in line with local protocols.

Numerator – the number in the denominator who have their vascular access monitored and maintained in line with local protocols.

Denominator – the number of people receiving haemodialysis.

Data source: Local data collection.

Outcomes

a) Infection rates (by vascular access type: arteriovenous fistula, arteriovenous graft, non-tunnelled line, tunnelled line).

Data source: Local data collection. The UK Renal Registry details renal centre-specific infection rates by access type as reported to Public Health England where completion of renal failure and dialysis information is available. See also service audit markers 1–3 for infection episodes in The Renal Association's Clinical practice guideline: vascular access for haemodialysis, recommendation 1.3.

b) Rupture of vascular access (fistula and graft).

Data source: Local data collection. See also service audit marker 4 for infection episodes contained within The Renal Association's Clinical practice guideline: vascular access for haemodialysis, recommendation 1.3.

c) Catheter patency.

Data source: Local data collection.

d) Interventions required for non-functioning or inadequately functioning access.

Data source: Local data collection.

What the quality statement means for service providers, healthcare professionals and commissioners

Service providers (Specialist renal centres) ensure that people receiving haemodialysis have their vascular access monitored and maintained in line with local protocols.

Healthcare professionals ensure that people receiving haemodialysis have their vascular access monitored and maintained in line with local protocols.

Commissioners (NHS England through specialised services area teams) ensure that service providers monitor and maintain vascular access in line with local protocols for people receiving haemodialysis.

What the quality statement means for patients, service users and carers

People receiving haemodialysis have regular checks of their vascular access (where the dialysis machine is connected to the blood vessels by a needle or tube) which is in line with local protocols.

Source guidance

- The Renal Association (2011) Clinical practice guideline: vascular access for haemodialysis, recommendations 1.2, 1.3, 4.2, 4.3 and 4.4.

Definition of terms used in this quality statement

Local protocols

Local protocols should be based on Renal Association guidance, which highlights the need for appropriate dialysis interventions, systematic observation and advanced surveillance to predict and prevent vascular access failure, and ensuring regular review and audit.

[Adapted from The Renal Association (2011) Clinical practice guideline: vascular access for haemodialysis]

Question for consultation

What are the most important procedures and processes to ensure effective monitoring and maintenance of vascular access and to prevent complications?

Status of this quality standard

This is the draft quality standard released for consultation from 12 June to 10 July 2014. It is not NICE's final quality standard on renal replacement therapy services. The statements and measures presented in this document are provisional and may change after consultation with stakeholders.

Comments on the content of the draft standard must be submitted by 5pm on 10 July 2014. All eligible comments received during consultation will be reviewed by the Quality Standards Advisory Committee and the quality statements and measures will be refined in line with the Quality Standards Advisory Committee's considerations. The final quality standard will be available on the NICE website from November 2014.

Using the quality standard

Quality measures

The quality measures accompanying the quality statements aim to improve the structure, process and outcomes of care in areas identified as needing quality improvement. They are not a new set of targets or mandatory indicators for performance management.

We have indicated if current national indicators exist that could be used to measure the quality statements. These include indicators developed by the Health and Social Care Information Centre through its Indicators for Quality Improvement Programme. If there is no national indicator that could be used to measure a quality statement, the quality measure should form the basis for audit criteria developed and used locally.

See NICE's What makes up a NICE quality standard? for further information, including advice on using quality measures.

Levels of achievement

Expected levels of achievement for quality measures are not specified. Quality standards are intended to drive up the quality of care, and so achievement levels of

100% should be aspired to (or 0% if the quality statement states that something should not be done). However, NICE recognises that this may not always be appropriate in practice, taking account of safety, choice and professional judgement, and therefore desired levels of achievement should be defined locally.

Using other national guidance and policy documents

Other national guidance and current policy documents have been referenced during the development of this quality standard. It is important that the quality standard is considered alongside the documents listed in ‘Development sources’.

Diversity, equality and language

During the development of this quality standard, equality issues have been considered and equality assessments are available.

Good communication between healthcare professionals and people receiving renal replacement therapy, and their families or carers (if appropriate) is essential. Treatment, care and support, and the information given about it, should be culturally appropriate. It should also be accessible to people with additional needs such as physical, sensory or learning disabilities, and to people who do not speak or read English. People receiving renal replacement therapy services should have access to an interpreter or advocate if needed.

Commissioners and providers should aim to achieve the quality standard in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity and foster good relations. Nothing in this quality standard should be interpreted in a way that would be inconsistent with compliance with those duties.

Development sources

Further explanation of the methodology used can be found in the quality standards Process guide on the NICE website.

Evidence sources

The documents below contain recommendations from NICE guidance or other NICE-accredited recommendations that were used by the Quality Standards Advisory Committee to develop the quality standard statements and measures.

Primary source

- Peritoneal dialysis. NICE clinical guideline 125 (2011).
- Clinical practice guideline: vascular access for haemodialysis. The Renal Association (2011).
- Clinical practice guideline: assessment of the potential kidney transplant recipient. The Renal Association (2011).
- Clinical practice guideline: peritoneal dialysis. The Renal Association (2010).
- Clinical practice guideline: haemodialysis. The Renal Association (2009).
- Clinical practice guideline: peritoneal access. The Renal Association (2009).
- Clinical practice guideline: planning, initiating and withdrawal of renal replacement therapy. The Renal Association (2009).
- Guidance on home compared with hospital haemodialysis for patients with end-stage renal failure. NICE technology appraisal guidance 48 (2002).

Policy context

It is important that the quality standard is considered alongside current policy documents, including:

- Renal care – health building note 07–02: main renal unit. Department of Health (2013).
- Renal care – Health building note 07–01: satellite dialysis unit. Department of Health (2013).
- 2013/14 NHS standard contract for renal dialysis: peritoneal (adult). NHS England (2013).
- 2013/14 NHS standard contract for renal dialysis: home (adult). NHS England (2013).
- 2013/14 NHS standard contract for renal dialysis: hospital and satellite (adult). NHS England (2013).

- National kidney care audit, vascular access – 2011. Health and Social Care Information Centre (2011).
- National kidney care audit, patient transport survey – 2010. Health and Social Care Information Centre (2010).

Related NICE quality standards

Published

- Infection control. NICE quality standard 61 (2014).
- Patient experience in adult NHS services. NICE quality standard 15 (2012).
- Chronic kidney disease. NICE quality standard 5 (2011).

In development

- Acute kidney injury. Publication expected October 2014.

Future quality standards

This quality standard has been developed in the context of all quality standards referred to NICE, including the following topics scheduled for future development:

- Renal stones.

Quality Standards Advisory Committee and NICE project team

Quality Standards Advisory Committee

This quality standard has been developed by Quality Standards Advisory Committee 1. Membership of this committee is as follows:

Mr Lee Beresford
Director of Strategy and System Development, NHS Wakefield Clinical Commissioning Group

Dr Gita Bhutani (Acting Chair)
Professional Lead, Psychological Services, Lancashire Care NHS Foundation Trust

Mrs Jennifer Bostock
Lay member

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The following specialist members joined the committee to develop this quality standard:

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Senior Nurse (Renal), Heart of England NHS Foundation Trust

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About this quality standard

NICE quality standards describe high-priority areas for quality improvement in a defined care or service area. Each standard consists of a prioritised set of specific, concise and measurable statements. NICE quality standards draw on existing NICE or NICE-accredited guidance that provides an underpinning, comprehensive set of recommendations, and are designed to support the measurement of improvement.

The methods and processes for developing NICE quality standards are described in the quality standards process guide.

This quality standard has been incorporated into the NICE pathway for chronic kidney disease.

NICE produces guidance, standards and information on commissioning and providing high-quality healthcare, social care, and public health services. We have agreements to provide certain NICE services to Wales, Scotland and Northern Ireland. Decisions on how NICE guidance and other products apply in those countries are made by ministers in the Welsh government, Scottish government, and Northern Ireland Executive. NICE guidance or other products may include references to organisations or people responsible for commissioning or providing care that may be relevant only to England.

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