NORTH WEST COAST STRATEGIC CLINICAL NETWORK
DIABETES STEERING GROUP (INSULIN PUMP SUB-GROUP)

Insulin pump policy – Service Specification
September 2018

Service/ care pathway	Continuous Sub-Cutaneous Insulin Infusion (CSII) Therapy (Insulin Pump Therapy)
Commissioner Lead	
Provider Lead	
Period	TBC
Date of Review	On-going.

Key Service Outcomes

The following objectives of CSII therapy are outlined in the NICE guidance:

- Improved glycaemic control (reduced HbA1c)
- Reduced rate of hypoglycaemia

Appropriate targets for such improvements should be set by the responsible physician, in discussion with the person receiving the treatment or their carer.

1. Purpose

1.1 Aims and objectives

An insulin pump therapy service needs to:

- be effective and efficient
- be responsive to the needs of people with type 1 diabetes or pancreatectomy, their parents and carers
- provide treatment and care based on best practice, as defined in NICE clinical guidelines (NG17 and NG18) on type 1 diabetes and TA151
- deliver the required capacity by providing insulin pump therapy for appropriate patients who meet the criteria in NICE technology appraisal TA151 on insulin pump therapy
- be integrated with other elements of care and services for people with type 1 diabetes
- define agreed criteria for referral, and follow local protocols and care pathways for people with type 1 diabetes or pancreatectomy
- define agreed criteria for referral for patients with cystic fibrosis-related diabetes
- be patient-centred and provide equitable access, ensuring that patients are treated with dignity and respect, are fully informed about their care and are able to make decisions about their care in partnership with healthcare professionals
- audit the provision of insulin pumps
- monitor the number of patients on insulin pump therapy
- demonstrate how it meets requirements under equalities legislation.

1.2 National/ local context and evidence base

Technology Appraisal 151 (2008)[1]

NICE technology appraisal TA151 on insulin pump therapy was published in July 2008, and primary care trusts had a statutory obligation to provide funding for insulin pumps within 3 months of the guidance being published. NICE technology appraisal TA151 on insulin pump therapy recommends continuous subcutaneous insulin infusion (CSII or 'insulin pump') as a clinically and cost-effective treatment option for adults and children with type 1 diabetes mellitus, where certain criteria are met.

2. Service Scope

2.1 Service Description

This service will provide a high-quality insulin pump service. NICE defines the key components of a high-quality insulin pump therapy service as:

- identifying people suitable for insulin pump therapy
- ensuring appropriate composition of the specialist team
- monitoring and supporting patients using insulin pumps
- developing a high-quality insulin pump therapy service

In addition to this the service will ensure

- provision for special groups such as transition from paediatric to adult services and pregnancy
- provision of on-going structured education for individuals using insulin pump therapy

Identifying people suitable for insulin pump therapy

The provider will provide this service in line with treatment recommended in NICE guidance. NICE technology appraisal TA151 on insulin pump therapy states that continuous subcutaneous insulin pump therapy is recommended as a treatment option for adults and children 12 years and older with type 1 diabetes mellitus provided that:

- Attempts to achieve target haemoglobin A1c (HbA1c) levels with multiple daily injections (MDIs) result in the person experiencing disabling hypoglycaemia. NICE guidance defines disabling hypoglycaemia as the repeated and unpredictable occurrence of hypoglycaemia that results in persistent anxiety about recurrence and is associated with a significant adverse effect on quality of life.

or

- HbA1c levels have remained high (that is, at 8.5% (69 mmol/mol) or above on MDI therapy (including, if appropriate, the use of long-acting insulin analogues) despite a high level of care.

Insulin pump therapy is recommended as a treatment option for children younger than 12 years with type 1 diabetes mellitus provided that:

- MDI therapy is considered to be impractical or inappropriate, and
- Children on insulin pumps would be expected to undergo a trial of MDI therapy between the ages of 12 and 18 years.

Insulin pump therapy is also recommended as a treatment option for patients who have had a pancreatectomy and otherwise meet the criteria in NICE TA151.

Insulin pump therapy is also recommended for a small cohort of patients with cystic fibrosis-related diabetes, as identified by the specialist nurse at Liverpool Heart and Chest Hospital. These would be patients whose diabetes is not controlled despite carefully managed multiple daily injections and carbohydrate awareness.

and/or

- At least two hypoglycaemic episodes per day

and/or

- A complete loss of hypoglycaemia awareness

Insulin pump therapy is not recommended for the treatment of people with type 2 diabetes mellitus.

Ensuring appropriate composition of the specialist team

The provider will provide this service in line with treatment recommended in NICE guidance.

NICE TA151 (insulin pump therapy) recommends that insulin pump therapy be initiated only by a trained specialist team, which should normally comprise a physician with a specialist interest in insulin pump therapy, a diabetes specialist nurse and a dietitian.

In line with NICE guidance, each centre must have as a minimum:

- a physician, nurse and dietitian who are specialised in insulin pump therapy and have received appropriate training to deliver a high-quality insulin pump therapy service
- practitioners who have knowledge of and competence with different insulin pump devices.

Monitoring and supporting patients using insulin pumps

The provider will provide this service in line with treatment recommended in NICE guidance.

NICE technology appraisal TA151 on insulin pump therapy states that following initiation in adults and children 12 years and older, insulin pump therapy should only be continued if it results in a sustained improvement in glycaemic control, evidenced by a fall in HbA1c levels, or a sustained decrease in the rate of hypoglycaemic episodes. Appropriate targets for such improvements should be set by the responsible physician, in discussion with the person receiving the treatment or their carer. Also, children on insulin pumps would be expected to undergo a trial of MDI therapy between the ages of 12 and 18 years.

Developing a high-quality insulin pump therapy service

The provider will provide this service in line with treatment recommended in NICE guidance.

NICE guidance makes a number of recommendations that refer to patient education for people with type 1 diabetes. NICE technology appraisal TA151 on insulin pump therapy recommends that specialist teams should provide structured education programmes and advice on diet, lifestyle and exercise appropriate for people using insulin pumps.

Having clear operational protocols for each element that are regularly audited and monitored will help to ensure this. Suggested requirements for an insulin pump service include:

- Where people with type 1 diabetes or pancreatectomy will routinely be managed, and where care planning will take place, including how this will link with specialists in insulin management
- Arrangements for transfer of patient care between sites and between services, including transfer between paediatric and adult services
- Type 1 diabetes education programmes for people of all ages, therapies and learning abilities and styles
- Arrangements for the pump service, for example local, hub and spoke etc., with details of how the components of the service will be delivered
- Administration of supplies
- Ongoing local support for pump users
- Clearly defined follow-up arrangements with monitoring of patient experience and satisfaction

The service should also include:

- Provision for pregnant women and transition from paediatric into adult services

Pregnancy

NICE (NG3) recommends that women with insulin-treated diabetes should be offered CSII during pregnancy if adequate blood glucose control is not obtained by multiple daily injections of insulin without significant disabling hypoglycaemia[2]. Although NICE does not specifically limit the use of CSII to patients with Type 1 Diabetes (states 'insulin-treated' as opposed to 'Type 1'), this indication is in line with NICE TA151. Thus insulin-treated patients meeting NICE TA151 criteria in pregnancy should be offered CSII as per the general Type 1 diabetes population.

Transitional care

Transition from paediatric to adult diabetes services should follow local protocols and pathways of care, in line with NICE NG18 (2015)[3] and best practice recommendations from the Department of Health (Transition: getting it right for young people (2006))[4]. The clinical expertise of the receiving adult diabetes team should be considered, and Children / Young people with type 1 diabetes treated with CSII should only transition to adult specialist diabetes services with expertise in insulin pump therapy.

2.2 Any exclusion criteria

This service will not provide insulin pumps to people who do not meet the NICE TA151 criteria, apart from patients who have had a pancreatectomy or patients with cystic fibrosis-related diabetes identified in section 2.1. Where a patient does not meet the NICE criteria for insulin pump therapy, but a clinician considers that this treatment may be of benefit, application for funding for an insulin pump must be made to the relevant Individual Patient Commissioning Committee via an Individual Funding Request (IFR). Such applications via this route must demonstrate clinical exceptionality and individual social circumstances cannot be taken into consideration.

Where insulin pump therapy is approved via an IFR (i.e. outside of this specification / NICE TA151), funding for insulin pump treatment and any associated consumables will only apply from the date of IFR approval. CCGs must not be invoiced retrospectively for a prior trial of insulin pump therapy or any associated consumables, and the 4-year warranty cycle will also only commence from the date of IFR approval, at the earliest. It is the responsibility of the specialist team to liaise with the insulin pump supplier to ensure this is adhered to.

2.3 Insulin pumps to be available to patients within this policy

The previous Insulin Pump Policy from the Merseyside Diabetes Network (2012) recommended that patients meeting NICE guidelines (TA151) could commence insulin pump therapy with the Medtronic, Animas or Roche systems without the need for prior approval via Individual Funding Request (IFR) from the respective commissioning group (then PCTs).

The specification allowed for the provision of any insulin pump meeting the patient's need, up to the value of the most expensive pump in the NICE TA151 review (adjusted for inflation). Although not available at the time, this included the Cellnovo pump (due to the comparative cost). Patch pumps (e.g. Omnipod) were not included in the specification and required individual funding via the IFR route.

Although not commonly used as an initial pump choice in the adult population across Merseyside (table 1), the Omnipod may be appropriate for some patients (e.g. in occupations where the presence of tubing would be problematic).

Occasionally, adult patients who use the Omnipod system may relocate to Merseyside from out of area and transfer their care to one of our pump centres. Continuation of the Omnipod pump for these patients often requires an IFR, even if patients are well established on this system. Similarly, an IFR is also often required if a patient using this system patient moves to a new house, transferring to a new CCG within Merseyside. Such IFRs for initiation, or continuation, of the Omnipod system in adults are typically approved by the respective IFR panel, without objection.

Funding arrangements for insulin pump therapy for paediatrics were historically the responsibility of NHS England, via a central funding arrangement. However, responsibility for funding transferred to CCGs in November 2016. Historically, all insulin pumps, including the Omnipod patch pump, have been available for use in paediatric patients. Thus, paediatrics patients meeting NICE TA151 criteria have been able to commence CSII using any currently available insulin pump, without the need for prior authorisation via IFR. Increasingly, patients using the Omnipod pump are being handed over to adult diabetes services from paediatrics (table 1). In some areas, completion of an IFR is required by the receiving adult specialist diabetes team for CSII treatment to be continued. Again, these are typically approved by the respective IFR panel, without objection.

	Total number of patients using insulin pumps	**n (%) using Omnipod system**
Adult Centres		
Southport	66	1 (1.5%)
Aintree	130	4 (3.1%)
St Helens	200	5 (2.5%)
Warrington	90	14 (15.6)
RLUH	450	20 (4.4)
Total (adults)	**936**	**44 (4.7%)**
Paediatric Centres		
Alder Hey	209	91
St Helens	47	14
Southport	8	0

Warrington	13	0
Total (paediatrics)	**277**	**105 (38%)**

Table1: Volume of insulin pump use, including Omnipod system, Merseyside Insulin pump centres (personal communication from pump teams; data 2017).

Since 2012 the cost of insulin pumps has changed such that now the difference in cost between the 'approved' and 'non-approved' systems is marginal for the commonly used insulin pumps (table 2). The YpsoPump, although less expensive, is new to market with local insulin pump centres having limited / no clinical experience of this system at the present time.

Name of pump	CGM enabled?	Cost of pump	Annual consumables	4-year cost
1. Roche Accu-Chek insight	No	£2,495	£1,514.64	£8,553.56
2. Roche Accu-Chek Combo	No	£2,495	£1,300.32	£7,696.28
3. Medtronic 640G	Yes	£2,995	£1,683	£9,727
4. Omnipod	No	1st year £2,558.20	£2,373.20	£9,677.80
5. DANA RS*	No	Starter kit £2,595	£1574.15 (year 1) £1,605,63 (years 2-4)	£9,083.03
6. YpsoPump	No	£1,900	£1,068	£6,172
7. Medtronic 670G**	Yes	£3,291	£1,683	£10,023
8. T-Slim**	Yes	£3,150	£1,587.95	£9,501.80

*Table: Commonly used /currently available insulin pumps across Merseyside Pump Centres (2018). Insulin pump costs excluding VAT - 2018 financial data provided by UK insulin pump company representatives for (1) & (2) Roche Diabetes Care Ltd, (3) Medtronic Ltd, (4) Insulet corporation), (5) Advanced Therapeutics (UK) Ltd (*assumes 2% consumables price increase per annum) and (6) Ypsomed Ltd. **Costs for (7) Medtronic Ltd and (8) Air Liquide Homecare Ltd provided 2019 as new to market.*

In light of current pump usage, marginal difference in costs between the leading pumps and the typical 'routine' approval of IFR requests for initiation, or continuation, of the Omnipod system, this policy proposes that all currently available insulin pumps should be available for patients meeting NICE TA151 criteria or with cystic fibrosis-related diabetes (i.e. Roche Accu-Chek Insight and Combo, Medtronic, Omnipod, DANA RS, YpsoPump and Tandem T-slim).

The standard warranty for insulin pumps is 4 years. If it is anticipated that Continuous Glucose Monitoring (CGM) may be required alongside insulin pump treatment ('sensor-augmented pump therapy'), then an insulin pump system that can incorporate this (i.e. a 'CGM-enabled' pump that will fully integrate with a CGM system) should be chosen. Patients should be made aware that the use of a non-CGM enabled insulin pump system may preclude the use of CGM alongside their device if the need for this arose within the 4-year warranty period of their insulin pump. The use of CGM alongside insulin pump therapy is

not covered by this specification and requests for this should be made via the individual commissioning route, or as agreed within the commissioning policy of the respective CCG. This service will only provide pumps from the agreed list held on the North West Coast Strategic Clinical Network website. Any amendments to this list will need to be approved by the respective CCGs prior to any changes being made. Where one of these pumps is not suitable and the service wishes to use an alternative pump, a request must be made via the individual patient commissioning route.

Switching insulin pumps mid-warranty is not covered by this specification. If an insulin pump is discontinued mid-warranty or if a patient wishes to switch to another pump mid-warranty, a request should be made via the IFR route.

Patients transferring from out of area who are using an insulin pump that is not locally approved should be able to continue their existing pump treatment until the warranty of the system expires. At the end of the warranty period they should be reassessed with a view to transferring to a commissioned pump. Request for renewal of a 'non-approved' pump at the end of the warranty period should be made via the IFR route.

2.4 Geographic coverage/ boundaries

This specification relates to all patients registered with a GP within all CCGs covered by Pan Mersey APC:

- NHS Halton CCG
- NHS St Helens CCG
- NHS Knowsley CCG
- NHS Liverpool CCG
- NHS South Sefton CCG
- NHS Warrington CCG
- NHS Southport and Formby CCG
- NHS Wirral CCG

Providers must notify in writing the departing and, where appropriate, receiving CCG immediately they become aware that a patient has changed GP practice.

Providers are reminded that they need to confirm whether prior authorisation is required for patients who are not registered with one of the CCGs listed above.

2.5 Interdependencies

Patient Education
All individuals beginning CSII therapy should be provided with specific training in its use. Ongoing support from a specialist team should be available, particularly in the period immediately following initiation of CSII. It is recommended that specialist teams agree a common core of advice for CSII users and that further work is undertaken to develop a national model of best practice.

Patient education should be delivered by the specialist team through an agreed programme, meeting national quality criteria, to demonstrate user competence in key areas. A record should be kept of this training and of user competence.

The programme should be quality assured using the National Diabetes Support Team/NICE TA/Diabetes UK self-assessment tool.

The curriculum for insulin pump training needs to incorporate insulin pump specific issues including:

- The mechanics for the insulin pump
- Insulin stacking and unexplained hypoglycaemia
- Unexplained hyperglycaemia
- Different bolus options depending upon the meal and glycaemic index
- Variable basal rate infusions
- Impact of insulin resistance e.g. menstrual cycle and “hormones”
- Enabling contact with other users
- Alcohol consumption
- Increased physical activity
- Sick day rules
- Ketone formation and management
- Returning to multiple daily injections

Regular education refreshers to be offered, for example, on an annual basis and attendance at these sessions could be used as one of the criteria for success. Insulin pump training in children incorporates the particular development of problem-solving skills for both the child and parents.

This service is required to link with all other providers of health and social care. This may include but is not limited to:

- General Practices
- Diabetes Retinal Screening Service
- Dietician services
- Podiatry services
- Healthy Lifestyles Teams
- District nurses
- Community Matrons
- Hospital services
- Social Services
- Occupational Therapists
- Physiotherapists
- Mental Health Teams
- Voluntary Services e.g. Diabetes UK
- Pharmacists
- Expert Patient Programme
- Schools and School health

2.6 Whole System Relationships

The service should be patient-centred and integrated with other elements of care for people with diabetes.

Provider/s should operate in a framework in which the patient’s usual source of primary care, their GP practice, has a central focus and responsibility.

Providers will maintain working relationships with suppliers of insulin pumps and the associated consumables. Providers will request that suppliers of insulin pumps provide monitoring information about consumable usage on a regular frequency no less than six

monthly. Providers are required to review this data and act on the information it contains, for example where it highlights patients who may be using too many or too few consumables, or patients who are making use of urgent delivery services. Providers are required to notify the relevant commissioner if they become aware of where any supplier of insulin pumps may have raised an inappropriate invoice. It is recommended that Providers attend regular monitoring meetings with the suppliers of insulin pumps and encourage suppliers of insulin pumps to notify them immediately of any unexpected ordering by patients.

2.7 Relevant networks and screening programmes

North West Coast Strategic Clinical Network Diabetes Steering Group is the relevant local diabetes network.

2.8 Training/ education/ research activities

Staff will need to be trained to do their job according to the competencies required. A number of competencies have been developed that are specific to CSII. These include:

- Diab2 IPT 01: Assess the suitability of insulin pump therapy for an individual with Type 1 diabetes
- Diab2 IPT 02: Provide preliminary education about insulin pump therapy for an individual with Type 1 diabetes
- Diab2 IPT 03: Provide dietary education for an individual with Type 1 diabetes who is contemplating insulin pump therapy
- Diab2 IPT 04: Enable an individual with Type 1 diabetes to administer insulin by pump
- Diab2 IPT 05: Provide on-going support to an individual administering insulin by pump

Diab2 IPT 06: Provide on-going dietary education for an individual with Type 1 diabetes administering insulin by pump.

3. Service Delivery

3.1 Service model

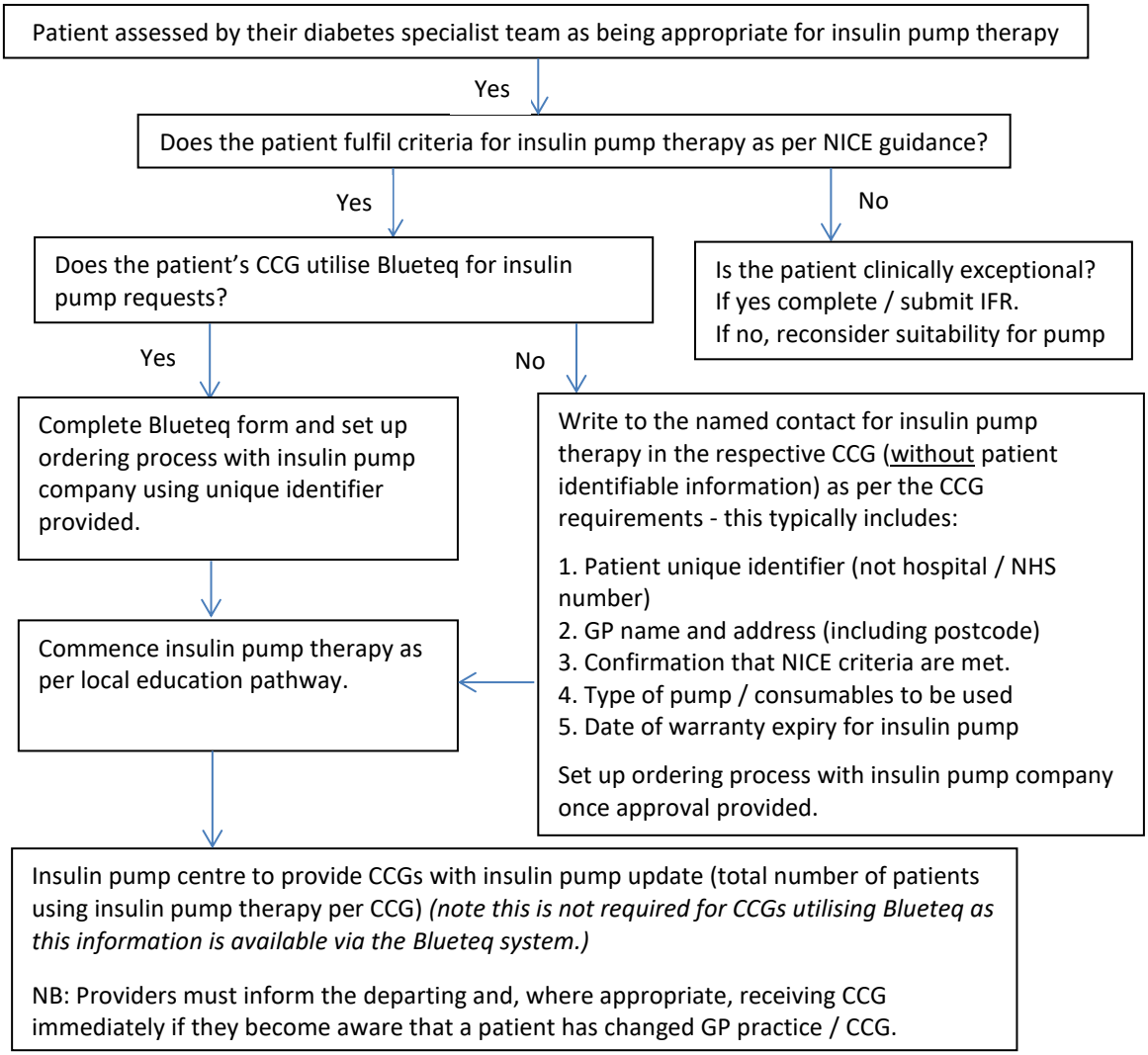
CSII therapy should be initiated by a trained specialist team, which will normally comprise:
Physician / Diabetes specialist nurse / Diabetes Dietitian

The range of activities carried out by the insulin pump team include:

- Confirmation that previous management has been impeccable and adhered to best practice in all respects. There may be room for further adjustment
- Assessment of suitability for insulin pump therapy
- Initiation of pump therapy for suitable patients
- Education & support for pump users
- Follow-up
- Support and training for other healthcare professionals involved
- Support and training for schools (where applicable)

Providers of insulin pump services should not advise patients to insure their insulin pumps. In the scenario of a pump or part of a pump needing to be replaced because of loss or theft the CCG should be notified of this in writing and a replacement ordered.

3.2 Care pathways



3.3 Referral Criteria and sources

NICE technology appraisal TA151 on insulin pump therapy states that continuous subcutaneous insulin pump therapy is recommended as a treatment option for adults and children 12 years and older with type 1 diabetes mellitus provided that:

- Attempts to achieve target haemoglobin A1c (HbA1c) levels with multiple daily injections (MDIs) result in the person experiencing disabling hypoglycaemia. NICE guidance defines disabling hypoglycaemia as the repeated and unpredictable occurrence of hypoglycaemia that results in persistent anxiety about recurrence and is associated with a significant adverse effect on quality of life.

or

- HbA1c levels have remained high (that is, at 8.5% or above) on MDI therapy (including, if appropriate, the use of long-acting insulin analogues) despite a high level of care.

Insulin pump therapy is recommended as a treatment option for children younger than 12 years with type 1 diabetes mellitus provided that:

- MDI therapy is considered to be impractical or inappropriate, and
- children on insulin pumps would be expected to undergo a trial of MDI therapy between the ages of 12 and 18 years.

Insulin pump therapy is not recommended for the treatment of people with type 2 diabetes mellitus.

3.4 Referral processes

Referrals from primary or secondary care to pump service should be addressed to:

- Aintree University Hospitals NHS Foundation Trust – Dr C Ooi
- Royal Liverpool and Broadgreen University Hospitals – Dr P. Weston
- Southport and Ormskirk Hospital NHS Trust - Dr S. Akhtar [adults] Dr M. Ng [Paediatrics]
- St Helens and Knowsley Teaching Hospitals NHS Trust – Dr N. Furlong (patient over 18 years) and Dr I. Ahmad (patient under 18 years).
- Warrington and Halton Hospitals NHS Foundation Trust – Dr S. Saunders or Dr P. Chattington
- Alder Hey Hospital – Dr Paul and Dr Ghatak

3.5 Discharge processes

If a pump is stopped, or never commenced, the relevant CCG must be notified in writing as soon as is practically possible, and the insulin pump supplier advised to cease supplying and invoicing for consumables.

3.6 Response times and prioritisation

This service should be provided in line with national waiting time guidance.

4. Other

4.1 Supporting Patients

Much of the support required by patients should be provided to them already as part of a good Type 1 diabetes service. This includes the development of an agreed care plan, structured education, and a helpline for clinical advice. Pump users must be able to access the same standard package of support available to all people with Type 1 diabetes, for example an agreed care plan and a named contact.

All pump centres should provide a 24 hour helpline for patients to obtain technical support for their pump. This can be provided by the pump suppliers.

In addition, a helpline should be provided by every insulin pump service to deal with clinical issues – it should not be provided by a third party organization such as the pump supplier. The provision of a clinical helpline is part of standard Type 1 diabetes care, and there is no reason why the same helpline cannot be used by pump users so long as staff are familiar with the clinical care of patients using CSII. Peer support and expert patient advice should be available

to all pump users if wanted or required. This service is currently not 24 hour; this may be reviewed in the future.

The service is required to educate patients on the process for ordering future consumables. This should include making patients aware that standing orders are not permitted.

5. Quality Requirements

Performance Indicator	*Indicator*	*Threshold*	*Method of Measurement*	*Consequence of breach*
Insulin Pump Audit	Relative quality criteria and associated standards are detailed in the NICE Insulin Pump Therapy Audit	Patient audit to cover a minimum of 100% of annual patient numbers.	Provider to complete audit tool within 3 months of the specification start date and a minimum of yearly thereafter.	Escalated within contract according to severity of breach

6. Activity

6.1 Indicative Activity Plan

It is difficult to provide an accurate estimate of projected insulin pump uptake. Expert opinion cited within the NICE costing tool for TA151 suggest potential uptake for CSII pump therapy in the UK of 8 - 15% of eligible patients aged 12 years and older, and 15 - 50% for patients aged under 12 years (it is recognised that uptake amongst this group could be greater in the long-term (NICE TA151))[1]

Historically, the uptake up CSII has been lower in the UK compared to Europe and the USA, which has been estimated to be >15% and approximately 40% of people with type 1 diabetes, respectively (Pickup J; 2011)[5].

Over recent years, the uptake of insulin pump therapy in the UK has increased. In the first UK-wide service level audit of insulin pump therapy in 2012, 6% of adults and 19% of children with type 1 diabetes were identified as using insulin pump therapy[6,7]

In England, the uptake of insulin pump therapy appears to be increasing. The National Diabetes Audit Insulin Pump Report (2015-2016) commissioned by the Healthcare Quality Improvement Partnership (published July 2017) reported an overall increase in the use of insulin pump therapy in England, from 13.5 % of patients with type 1 Diabetes (2014-2015 data) to 15.3% (2015-2016 data)[8].

It is likely that the uptake of insulin pump therapy will continue to increase. Recent NICE Guidelines for the management of Type 1 diabetes in Children and Adults both recommend aiming for an HbA1c target of < 48 mmol/mol (6.5%) (NICE NG 18; NICE NG 17), compared to the previously recommended HbA1c target of < 58 mmol/mol (7.5%)[9]. Aiming for very tight glycaemic control increases the risk of hypoglycaemia[10] and it is likely that the pursuit of such glycaemic targets will result in more patients will meeting NICE TA151 criteria for CSII therapy.

6.2 Capacity Review

No provider is guaranteed any activity under this specification; this will be determined by patient choice.

7. Prices & Costs

7.1 Price

*** Please note this section will be amended as appropriate by each CCG as relevant to their provider ***

Basis of Contract	Unit of Measurement	Price	Thresholds	Expected Annual Contract Value (for this service)
National Tariff	Outpatient appointments will be funded through the existing arrangements for PBR tariff.	As per main contract	As per main contract	As per main contract
Non-Tariff Price (cost per case/cost and volume/block/other)*	Insulin Pumps and pump consumables are specifically excluded from payment by results (2011/12). As such, invoices for insulin pumps and their consumables provided under this specification should be directed to the relevant CCG for payment.	N/a	N/a	N/a
Total		£ N/a		£ N/a

The provider will be responsible for all costs relating to patients who do not meet the criteria outlined in this specification.

NOTE: Insulin pumps have a 4 year warranty and need replacing once the warranty has expired. Providing the patient continues to benefit from pump therapy a replacement pump should be ordered for the patient at the end of the current pump warranty, and the relevant CCG notified of this. Insulin pump services should not change a patient's insulin pump within the 4 year warranty period unless clinically exceptional circumstances necessitate an immediate change, in which case the relevant CCG will be notified.

8. References

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