Salford NHS
Primary Care Trust

Salford Royal Hospitals NHS
NHS Trust

ACTION ON NEUROLOGY PILOT SITE

INTERMEDIATE SERVICES FOR PATIENTS WITH HEADACHE AND EPILEPSY

FINAL REPORT

Prepared by C Eckersley on behalf of the Salford *Action On* Neurology Project Team
March 2005

SUMMARY

A project to assess the feasibility of establishing a primary care intermediate assessment and treatment service for specific neurological conditions, which has resulted in the development of two GPwSI (General Practitioner with Special Interest) led services for headache, migraine and epilepsy. With the GPwSI due to complete clinical competencies by early summer 2005, the full services are entering the implementation phase. It is anticipated that 20-30% of referrals will be managed in primary care without secondary care intervention.

INTRODUCTION and CONTEXT

The main problem identified in local neurology services was very long wait times for outpatient neurology appointments (at start of pilot up to 21 weeks). In spite of increased investment into neurology outpatients across the conurbation, evidence has shown that demand continues to outstrip capacity.

A study of referrals received by Hope Hospital during the period 01/04/03 – 31/09/03 from Salford PCT patients showed that approximately 15% of referrals were for headache or migraine. There were no cases in the study where the symptoms were as a result of a serious condition. The burden of headache upon both primary and secondary care is recognised throughout the conurbation. Most adult sufferers can be successfully diagnosed and treated within primary care and referral is only needed if problems with diagnosis or treatment arise.

Established or suspected epilepsy accounted for a further 20% of referrals. Most of these referrals were directed to general neurology with a 15-week wait for first outpatient appointment, with others being directed to a "first seizure" clinic where they were seen within two weeks. Referrals from A&E and GPs reach neurology via different pathways.

Salford has a strong track record of integrated primary and secondary care which has shown proven benefits across the city in terms of reduction in waiting times, better access, greater convenience and choice for the patient whilst freeing capacity in the hospital. An analysis of Salford GP referrals suggests that the implementation of a GPwSI led primary care based neurology services should reduce the number of secondary care neurology referrals by around 25-30%. This will free capacity for more urgent conditions, whilst reducing wait times and providing an enhanced service provision for those patients with complex headaches and diagnosed epilepsy.

The intermediate assessment and treatment (Tier 2) service has been developed as part of the 'Action On Neurology' Project [1] and within this context Salford PCT and Salford Royal Hospitals NHS Trust are acting as a pilot site for this service. Trained General Practitioners with Special Interest (GPwSI) and a Clinical Nurse Specialist (CNS) will provide the service.

[1] 'Action On' is a Modernisation Agency national incentive, which is funding and providing support to 8 pilot sites across the country, which are working to redesign and improve neurology services.

AIMS and OBJECTIVES

The intermediate neurology assessment and treatment (Tier 2) services aim to:

- Provide a high quality intermediate tier service within primary care, directly accessible by Salford GP Practices, enabling easy and timely access for suspected and established headache and epilepsy patients.
- Be supported by common standards, agreed mechanisms, specific inclusion and exclusion criteria to ensure patients are referred to the most appropriate point of care.
- Reduce referral rates to Salford Royal Hospitals Trust by ensuring appropriate patients are managed within primary care, thereby supporting a reduction in waiting times and a release of Consultant Neurologists time for more appropriate/complex cases.
- Access, Booking and Choice initiatives will be supported by the service through the current Salford RBMS and operational policy therein.
- Provide information, support and training to GP practices and other primary care practitioners in order to develop services for headache, migraine and epilepsy patients at a practice level.

HOW IT WAS DONE – WHAT MADE IT WORK

A project group was set up composed of key stakeholders as listed below. This team, assisted by a designated project manager, undertook and analysed the initial referral audit, liaised between primary and secondary care, recruited GPwSI, identified suitable academic training courses and clinical mentors and developed the patient referral pathways.

Project Group Members
Action On Representative
Project Manager
Clinical Group Director – Neurology
Service & Business Managers – Neurology
Tier 2 Management Lead - PCT
Associate Medical Director – PCT

Other participants were invited to attend as relevant e.g. PCT medicines management.

The primary and secondary trusts enjoy an excellent clinical, executive and managerial relationship that formed a firm basis for joint working. The project reports to the Tier 2 Steering Group (PCT) and the Planned Care Redesign Group (acute trust), with upward reporting to PEC and Board level.

Primary care views on the proposed service developments were sought during two regular GP practice education and training afternoons.

The centralised referral management system employed across Greater Manchester enabled easy access and analysis of referrals.

ACHIEVEMENTS, OUTCOMES and SERVICE CHANGE

The PCT successfully recruited two GPs from its established general practice base of principal and salaried practitioners. Two salaried GPs were selected to undertake training in the specialist areas (due to complete June 2005). Specialist training takes the form of clinical teaching and mentoring during consultant outpatient

clinics complemented by a suitable academic course.[2,3,4,5] Each GPwSI is contracted for two sessions per week in their special role. When trained, the GPwSI will undertake his or her own clinics, initially based within the hospital with a phased transfer out to a primary care setting.

Referrals for both services will be sent via the single point of entry for referrals at the Referral Booking Management Centre. Each GPwSI will electronically triage the referrals for their own speciality and indicate the most appropriate outpatient service provider required, using defined criteria and referral pathways[6]. 'Red Flag' patients (not suitable for primary care / urgent/ suspicious pathology) will be directed to the secondary provider indicated on the referral letter (usually Salford Royal Hospitals NHS Trust) and allocated an urgent appointment in the most appropriate clinic according to local outpatient procedures

Appropriate patients will be seen by the respective GPwSI for full clinical assessment, with authority to directly request pertinent diagnostic tests as required to reach a definitive diagnosis. This will include direct access to MR/CT scans and EEG – any patients requiring consultant opinion will be fast-tracked into secondary care. Half of the headache patients are expected to require a follow-up appointment in primary care.

All patients with established epilepsy will be directed to the neurology consultant for review in the first instance. Suspected patients who are found to have a definitive diagnosis of epilepsy after GPwSI assessment will be fast-tracked into secondary care for specialist consultant input. Patients whose symptoms are not caused by epilepsy will be directed into appropriate secondary care specialities, referred back to their GP with advice or reassured and discharged.

An additional specialist nurse will be employed to give support and advice to epilepsy patients and primary care colleagues, undertaking a large proportion of patient follow-ups. They will also have a specific role around the care of young female patients particularly during conception and pregnancy. Salford has an expected prevalence of 1200 epilepsy patients and NICE Epilepsy guidelines recommend annual follow-up for all of them.

Neither GPwSI will prescribe directly. Patients or their GPs will be advised of suitable medications and treatments and these will be prescribed by the patient's GP and dispensed in the normal way.

Each GPwSI will undertake 6/8 clinical sessions per month. On completion of training and the phased transfer period – one session per month will continue to be provided along side the consultant mentor. The remaining 2 sessions will be used to provide information, support and training to GP practices and primary care health professionals in developing better services at practice level. All GPwSI are allocated protected learning time.

To comply with local Tier 2 targets, all patients must have their first face-to-face assessment within 6 weeks of the date of referral. In our other Tier 2 services, this is usually 1-3 weeks maximum.

RISKS

The main risk is sustainability of services that are dependent on one individual, particularly where the demand does not justify training of a second GPwSI. However other adjoining PCTs are becoming interested in duplicating our model in their own PCT, which may provide opportunities for joint working and cross cover.

---

[2] Post graduate Diploma in Headache and Migraine – Centre for Community Neurological Studies, Leeds Metropolitan University
[3] M.Sc. module in Epilepsy Management, University of Liverpool
[4] See Appendix – Draft Competency framework for GPwSI in Headaches
[5] See Appendix – Draft Competency framework for GPwSI in Epilepsy
[6] High Level Referral Pathway for Epilepsy

LESSONS LEARNT

- Persistence, tact and patience are required in co-ordinating meetings involving clinicians, due to their contracted consultant commitments and clinical responsibilities.
- Reliable information is essential in calculating capacity and demand and expected deflection rates from secondary care.
- It is essential to involve stakeholders and communicate widely with colleagues to establish ownership and prevent misunderstandings at a later date.
- Detailed development work is progressed better through small meetings with appropriate individuals than within the project group forum.

CONCLUSIONS

Patient feedback from our other Tier 2 services indicates that patients are very satisfied with the timely assessment of their condition. They are satisfied that the GPwSI or CNS has the specialist skills required to assess and/or treat their problem and appreciate the convenience of being seen in a more informal friendly primary care environment, often closer to their own home, with easier access and free parking. All Tier 2 patients are offered the choice of date, time and venue of their appointments.
Tier 2 services are subject to "Value for Money" comparisons with services delivered in secondary care. This work is ongoing.

BENEFITS REALISATION

The project expects to realise a number of benefits that will be monitored from and after implementation.

- Timely and easy access to high quality intermediate Tier 2 assessment
- Reduction in referral rates and subsequent waiting times for neurology
- Reduced DNA rate
- Release of consultant neurologist time for more appropriate/complex cases
- Increased appropriateness of referrals into secondary care
- Investigation of patients prior to referral into secondary care
- Ability to meet NICE guidelines for epilepsy
- GPwSI contribution to general practice education and training programme
- Sustained links between the primary and secondary care

APPENDICES

A - Draft competency framework for Headaches
B - Draft competency framework for Epilepsy
C - High level Referral Pathway for Epilepsy (referral pathway for headaches at design stage)
D - Project links to Quality Requirements of NSF for Long Term Conditions & High Impact Changes- Headache
E - Project links to Quality Requirements of NSF for Long Term Conditions & High Impact Changes- Epilepsy

Project Team Members: -

Dr Wolfgang Schady	Clinical Group Director – Neurology
Dr Stuart Talbot	Associate Medical Director
Cara Pursall	Project Manager
Bernie Delahoyde	Associate General Manager – Neurosciences
Leigh Latham	Assistant Service Manager - Neurosciences
Cheree Roe	Business Manager - Neurosciences
Jack Sharp	Head of Operations – PCT locality
Charmaine Eckersley	Operations Manager – Intermediate Tier 2

APPENDIX A

DRAFT COMPETENCY FRAMEWORK FOR GPwSI HEADACHES

GPwSI ____________________ **Mentor** ____________________

Competency	How will the competency be tested	Tested as Competent By	Date
CLINICAL ASSESSMENT			
Able to triage appropriately	90% of referrals directed into primary or secondary care are managed within that service		
Taking and recording headache history in a systematic manner allowing diagnostic consideration	Demonstration of skills under direct supervision by senior clinician/mentor		
Headache targeted screening neurological examination	Demonstration of skills under direct supervision by senior clinician/mentor		
UNDERPINNING KNOWLEDGE			
Migraine with and without aura • Diagnosis • Search for and modification of risk factors • Objective setting • Therapeutic plan • Counselling	Demonstration of knowledge by personal study & relevant course, supported by appraisal from clinical supervisor during training		
Tension type headache • Diagnosis • Search for and modification of risk factors • Objective setting Therapeutic plan	Demonstration of knowledge by personal study & relevant course, supported by appraisal from clinical supervisor during training		
Approach to other benign headaches:- • Cervicogenic headache • Chronic daily headache • Medication misuse headache	Demonstration of knowledge by personal study & relevant course, supported by appraisal from clinical supervisor during training		
Cluster headache • Diagnosis • Investigation • Pharmacological treatment • Use of oxygen	Demonstration of knowledge by personal study & relevant course, supported by appraisal from clinical supervisor during training		
Symptoms suggesting sinister cause of headaches • Tumours • Vascular causes • Intracranial hypertension	Demonstration of knowledge by personal study & relevant course, supported by appraisal from clinical supervisor during training		

Serious Cause for Headache:- • Intracranial tumours • Meningitis • Subarachnoid haemorrhage • Temporal arteritis • Glaucoma • Idiopathic intracranial hypertension	Demonstration of knowledge by personal study & relevant course, supported by appraisal from clinical supervisor during training		
Principles of management of migraine:- • Acute attacks • Prophylaxis • Non-drug intervention	Demonstration of knowledge by personal study & relevant course, supported by appraisal from clinical supervisor during training		
DIAGNOSTICS			
Basic understanding of CT brain scanning	Demonstration of knowledge by personal study & relevant course		
Basic understanding of MR brain scanning	Demonstration of knowledge by personal study & relevant course.		
PHARMACOLOGY			
Knowledge of pharmalogical treatments for headaches and their uses.	Demonstration of knowledge by personal study & relevant course, supported by appraisal from clinical supervisor during training		
Knowledge of side effects, drug interactions and contra-indications.	Demonstration of knowledge by personal study & relevant course, supported by appraisal from clinical supervisor during training		
OTHER.			
Psychosocial aspects of headache.	Demonstration of knowledge by personal study & relevant course, supported by appraisal from clinical supervisor during training .		
Co-morbid factors influencing effective headache management e.g. psychiatric illness.	Demonstration of knowledge by personal study & relevant course, supported by appraisal from clinical supervisor during training		
The role of patient support organisations	Evidence of directing patients to support organisations.		

I agree that the named individual ……………………………………………is competent in the management of Headaches and Migraines. I have tested all the above competencies and agree that the individual named above is competent to manage this group of patients as an individual caseload.

Signed: ____________________________ **Clinical Supervisor**

Name: ____________________________

Date: ____________________________

Number of sessions supervised ……………… Start Date / / End Date / /
Place of Supervision – Pain Clinic, Hope Hospital, Salford

Signed: ____________________________ **Academic Supervisor**

Name: ____________________________

Date: ____________________________

Name of course attended – Post-Graduate Diploma in Headaches and Migraine
Course Venue – Centre for Community Neurological Studies, Leeds Metropolitan University
Start Date / / Completed Date / /

Signed: ____________________________ **GP with Special Interest**

Name: ____________________________

Date: ____________________________

APPENDIX B

DRAFT COMPETENCY FRAMEWORK FOR GPwSI EPILEPSY

GPw SI ____________________ Mentor ____________________

Competency	How will the competency be tested	Tested as Competent By	Date
CLINICAL ASSESSMENT			
Able to triage appropriately	90% of referrals directed into primary or secondary care are initially managed within that service without transfer		
Taking full medical history concentrating on:- • Description of attacks from the patient and a witness • Description of the prodome and postictal state • Duration and frequency of the attacks • Triggers • Relevant past medical history and family history	Demonstration of skills under direct supervision by senior clinician/mentor		
Nervous system examinations:- • Fundi, cranial nerves • Upper limbs • Lower limbs	Demonstration of skills under direct supervision by senior clinician/mentor		
UNDERPINNING KNOWLEDGE			
Classification of the epilepsies, epileptic seizures and syndromes	Demonstration of knowledge by personal study & relevant course.		
Recognition of different seizure types	Demonstration of knowledge by personal study & relevant course, supported by appraisal from clinical supervisor during training		
Differential diagnosis:- • Reflex (vasovagal syncope) • Cardiac syncope • Autonomic dysfunction • TIAs • Transient global amnesia • Migraine • Cataplexy • Drop attacks • Involuntary movement disorders	Demonstration of knowledge by personal study & relevant course, supported by appraisal from clinical supervisor during training		
Non-epileptic attack disorder	Demonstration of knowledge by personal study & relevant course, supported by appraisal from clinical supervisor during training		

Epilepsy associated with Learning Disability	Demonstration of knowledge by personal study & relevant course, supported by appraisal from clinical supervisor during training		
DIAGNOSTICS			
Indications for CT brain scan	Demonstration of knowledge by personal study & relevant course, supported by appraisal from clinical supervisor during training		
Indications for EEG	Demonstration of knowledge by personal study & relevant course, supported by appraisal from clinical supervisor during training.		
Indications for MR brain scan	Demonstration of knowledge by personal study & relevant course, supported by appraisal from clinical supervisor during training.		
Blood level monitoring	Demonstration of knowledge by personal study & relevant course, supported by appraisal from clinical supervisor during training.		
PHARMACOLOGY			
Knowledge of pharmacological treatments (anti-epileptics)	Demonstration of knowledge by personal study & relevant course, supported by appraisal from clinical supervisor during training		
Knowledge of side effects, drug interactions and contra-indications.	Demonstration of knowledge by personal study & relevant course, supported by appraisal from clinical supervisor during training		
Effect of anti-epileptic drugs on the foetus, implications of drug treatment in pre-conception care and the management of breast-feeding mothers	Demonstration of knowledge by personal study & relevant course, supported by appraisal from clinical supervisor during training		
Emergency treatment of epilepsy.	Demonstration of knowledge by personal study & relevant course, supported by appraisal from clinical supervisor during training		
INVASIVE TREATMENTS			
Knowledge of epilepsy surgery	Demonstration of knowledge by personal study & relevant course		
Vagal nerve stimulation			

	Demonstration of knowledge by personal study & relevant course		
OTHER.			
Psychosocial aspects of epilepsy.	Demonstration of knowledge by personal study & relevant course, supported by appraisal from clinical supervisor during training .		
Legal aspects of epilepsy	Demonstration of knowledge by personal study & relevant course.		
Understanding the role of the specialist nurse	Demonstration of ability to work in team to plan and deliver service provision and individual patient care.		
The role of patient support organisations	Evidence of directing patients to support organisations		

I agree that the named individual …………………………………………….is competent in the management of Epilepsy. I have tested all the above competencies and agree that the individual named above is competent to manage this group of patients as an individual caseload.

Signed: ______________________________ **Clinical Supervisor**

Name: ______________________________

Date: ______________________________

Number of sessions supervised ……………… Start Date / / End Date / /
Place of Supervision – Neurology / Epilepsy Clinic, Hope Hospital, Salford

Signed: ______________________________ **Academic Supervisor**

Name: ______________________________

Date: ______________________________

Name of course attended – MSc. Module in Epilepsy
Course Venue – University of Liverpool
Start Date / / Completed Date / /

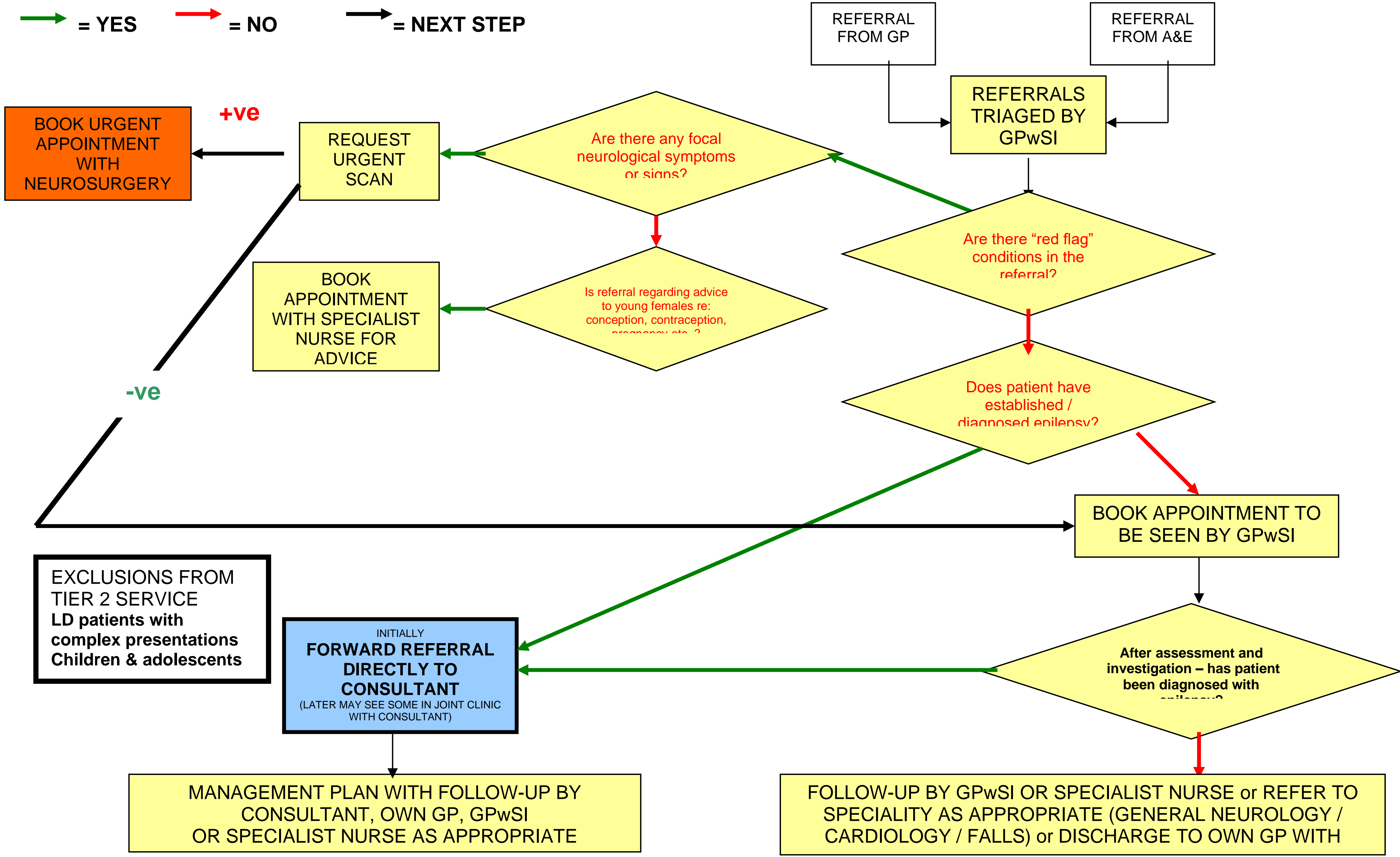
Signed: ______________________________ **GP with Special Interest**

Name: ______________________________

Date: ______________________________

APPENDIX C

HIGH LEVEL PATIENT PATHWAY



APPENDIX D

HOW HEADACHE PROJECT LINKS TO:-
QUALITY REQUIREMENTS OF THE NATIONAL SERVICE FRAMEWORK FOR LONG TERM CONDITIONS & HIGH IMPACT CHANGES

Change	Description	Does your project contribute to this?	Please describe how…	What evidence do you have? (Or will have)
QR! (links to HIC 5 & 7)	A person centred service	Y	As part of the Tier 2 "Choose and Book" process in Greater Manchester, all triaged patients will be offered the opportunity to discuss the triage outcome of their referral and the reasons for directing them to a particular service.	Undertake patient satisfaction surveys. % being offered / taking up option to discuss outcome of triage % fully booked
QR" (links to HIC 2)	Early recognition, prompt diagnosis and initial treatment	Y	The GPwSI will have direct access to request radiological investigations, previously requiring consultant authorisation.	Number & Appropriateness of referral for investigation (comparison with previous)
HIC 2	Improve patient flow by improving access to diagnostic tests	Y	Patients assessed and/or treated by the GPwSI are likely to be seen within 1-2 weeks. Many will be completely managed in primary care. The Tier 2 service will eventually be offered in the new health and social care centres, designed specifically to be friendly environments and improve the patient experience.	Waiting times figures.
HIC 5	Avoid unnecessary follow-up	Y	The Tier 2 Headache service will increase availability of other neurology out-patient slots.	Capacity figures and waiting times in secondary care.
HIC 7	Apply a systematic approach to the care of people with long term conditions	Y	The GPwSI will provide education, support and training to GP practices and other primary care practitioners in order to develop services for headache patients at a practice level.	Number of practices / health care professionals being trained. Reduction in referrals to service.
HIC 8	Improve access by reducing the number of queues	Y	See HIC 2 above.	See HIC 2 above.
HIC 9	Optimise patient flow through service bottlenecks using process templates	Y	Expected removal of up to 230 new and 115 follow-up patients per annum from entering the secondary care service as a result of this service. Referral into secondary care will become consistent through the use of inclusion and exclusion criteria and standard protocol.	Onward referral rate to consultant
HIC 10	Redesign and extend roles	Y	There may be opportunity to recruit assistant practitioners to operate across a number of Tier 2 services. The GPwSI role extends the role of salaried and principal GPs encouraging personal development, improving morale, recruitment and retention.	Review of skill mix

APPENDIX E

HOW EPILEPSY PROJECT LINKS TO:-
QUALITY REQUIREMENTS OF THE NATIONAL SERVICE FRAMEWORK FOR LONG TERM CONDITIONS & HIGH IMPACT CHANGES

Change	Description	Does your project contribute to this?	Please describe how…	What evidence do you have? (Or will have)
QR! (links to HIC 5 & 7)	A person centred service	Y	As part of the Tier 2 "Choose and Book" process in Greater Manchester, all triaged patients will be offered the opportunity to discuss the triage outcome of their referral and the reasons for directing them to a particular service.	Undertake patient satisfaction surveys. % being offered / taking up option to discuss outcome of triage % fully booked
QR2 (links to HIC 2)	Early recognition, prompt diagnosis and initial treatment	Y	The GPwSI will have direct access to request radiological investigations, previously requiring consultant authorisation.	Number & Appropriateness of referral for investigation (comparison with previous)
QR4-8 & 10 (links to HIC 7)	Early & specialist, community, vocational rehabilitation. Equipment & accommodation. Personal support & care. Support for families & carers	Y	Additional specialist nurse resource will enable holistic approach to self-management of condition. Health & Social Care Centres where service delivered will provide "one-stop shop" with access into voluntary and local authority services.	Number of patients able to self-care with minimal intervention.
HIC 2	Improve patient flow by improving access to diagnostic tests	Y	Patients assessed and/or treated by the GPwSi are likely to be seen within 1-2 weeks. Some will be completely managed in primary care. The Tier 2 service will eventually be offered in the new health and social care centres, designed specifically to be friendly environments and improve the patient experience.	Waiting times figures.
HIC 5	Avoid unnecessary follow-up	Y	The Tier 2 Epilepsy service will increase availability of other neurology out-patient slots.	Capacity figures and waiting times in secondary care.
HIC 7	Apply a systematic approach to the care of people with long term conditions	Y	The GPwSI will provide education, support and training to GP practices and other primary care practitioners in order to develop services for epilepsy patients at a practice level.	Number of practices / health care professionals being trained. Reduction in referrals to service.
HIC 8	Improve access by reducing the number of queues	Y	See HIC 2 above.	See HIC 2 above.
HIC 9	Optimise patient flow through service bottlenecks using process templates	Y	Expected removal of up to 168 new and 112 follow-up patients per annum from entering the secondary care service as a result of this service. Referral into secondary care will become consistent through the use of inclusion and exclusion criteria and standard protocol.	Onward referral rate to consultant
HIC 10	Redesign and extend roles	Y	There may be opportunity to recruit assistant practitioners to operate across a number of Tier 2 services. The GPwSI role extends the role of salaried and principal GPs encouraging personal development, improving morale, recruitment and retention.	Review of skill mix