HSC Health and Social Care Board

SOUTHERN PRIMARY EYECARE ASSESSMENT & REFERRAL SERVICE PILOT "SPEARS":

PILOT EVALUATION REPORT




Contents

1. Acknowledgements

The Directorate of Integrated Care, Health and Social Care Board would like to extend their thanks and appreciation to the many people who assisted in the planning, delivery and evaluation of the SPEARS pilot. In particular, thanks are extended to the Southern Local Commissioning Group for their support for the pilot and to the accredited optometrists in the pilot area for their dedication, enthusiasm and commitment in providing the service to their patients.

2. SPEARS in Context

A patient who develops an acute, sudden onset, eye problem needs to be seen promptly to assess whether this is a minor, easily managed, condition or a more serious and potentially sight threatening disease process which requires urgent specialist attention. An easily accessible, well defined pathway is vital for the safe management of all these patients.

2.1 Northern Ireland

In the United Kingdom approximately 9% of all hospital outpatient referrals are for ophthalmology[1] which, in the context of Northern Ireland, equates to over 100,000 patients attending hospital annually with eye problems. This places a significant demand on ophthalmology services and the demographic changes of our aging population and rapid developments in treatment for ocular conditions further challenge the ophthalmology demand-capacity gap. This further highlights the need for well-defined care pathways to optimise the use of clinical resources and ensure the best outcomes for patients.

In Northern Ireland patients with acute, sudden onset, eye conditions currently have up to seven 'pathway' choices for investigation of their eye condition. The dilemma facing these patients is clearly demonstrated in the following testimonial of a patient who recently experienced a sudden onset eye problem:

"It is easy to see…."

In late autumn 2015 I experienced my first "eye problem", I woke with a sore, very swollen, dark red eye which was barely open and very sticky. I did not know where to go, it was a Sunday and I was faced with the only option I knew and could think of and that was to go to A&E. So I duly went to the A&E unit at the Mater Hospital where after a wait of approximately 2 hours, I was prescribed eye drops and advised that if my problem was not any better by the following morning that I should attend Eye Casualty on Level 8 in RVH.

The following morning I was still concerned about my eye problem so I went to Eye Casualty and waited to be seen. After a 1.5 hour wait I was advised I had conjunctivitis and prescribed antibiotics to treat it – oral tablets and eye drops. I followed the instructions and in addition attended my GP about the problem. Two weeks later the conjunctivitis in the same eye reoccurred and my other eye had slight infection and I went back to see my GP who did not examine or assess my eyes (due to lack of equipment) but prescribed some more of the same antibiotics and I was advised to take time off work as I was unable to see properly.

I was very concerned when the problem seemed to persist and spoke to a friend. She advised that I could go to see my optometrist who would have all the necessary equipment and would be able to undertake all the tests required to investigate my problem. I rang my local optometrist and was able to get an appointment within 24 hours. The optometrist examined my eyes thoroughly, he put my mind at ease immediately by a test which told him there was nothing sinister but it was a viral infection and this infection is very hard to treat as it can spread to the other eye so easily or to other members of the family. He put in place a regime for treatment and management which included cream to apply directly to the eye and Systane lid wipes and eye drops for cooling the eye which I used regularly to hydrate the eyes. He also arranged 2 follow up assessments, one a week later and then another a week after that, by which time the eyes were completely clear.

My experience has been positive and negative. I can say positively that all the health care professionals who treated me were very helpful and considerate but if I consider my care pathway I would say that it had a lot of very unnecessary steps and was torturous. The cost to HSC was excessive and I utilised services (people and places) which were not best suited to my need at that time. The availability of services closer to home or work is a major consideration and although my employer understood, I can imagine others would not be so fortunate and may indeed be at risk if they cannot access the care they require in a timely manner.

I now know that my optometrist was the person best placed to help me in the first instance and that he has the necessary skill and knowledge to have assessed my condition and managed it appropriately – safely and effectively in a convenient location at a time that suited me.

I would not have needed to attend A&E with all the costs and inconvenience that that entailed. On reflection, I also think that I would not have required the medical intervention I received in terms of anti-biotic prescribing and the use of GP time.

If a service to assess and manage patients with minor eye problems was available and was properly signposted (such as the HSC Choose Well campaign does) then I feel that patients would benefit from receiving safe and appropriate care closer to home with all the positive experience that that would provide. I am glad to say that my eye condition has resolved but should it reoccur I would now know that my optometrist should be my first port of call.

This patient attended four different health care providers about her eye problem and a further three options would have been available to her as indicated in Figure 1.

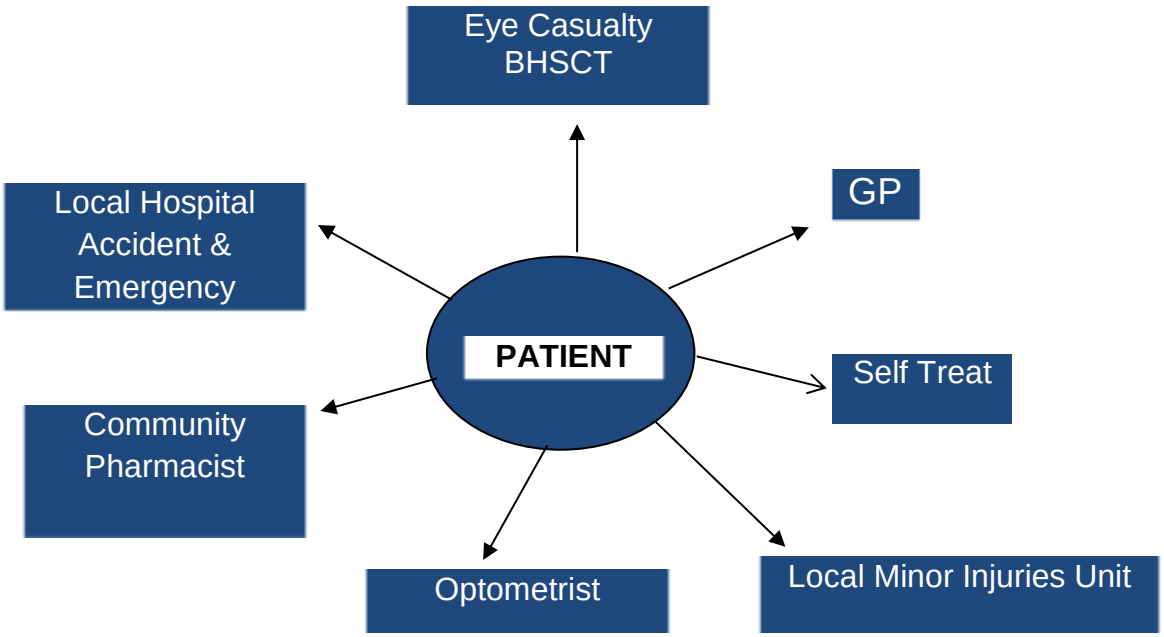

Figure 1: Current Acute Eyecare Pathway Choices in Northern Ireland

As indicated a patient with an acute, sudden onset, eye problem currently has seven eye care pathway options and with each option there may be a *different approach* to managing the patient's condition and, potentially, a *different outcome* depending on the waiting time for an assessment, the diagnosis, skill and experience of the clinician and the time and equipment available. The most concerning scenario is that a patient with a serious, potentially sight threatening, condition may not be able to access the specialist care needed, for example at Eye Casualty, as that resource is being used by a patient with a minor condition that could have been readily managed in primary care.

Developing Eyecare Partnerships – Planning for Eyecare in Northern Ireland

Developing Eyecare Partnerships[2] (DEP) is the five year plan for the commissioning and provision of integrated eye care services in Northern Ireland. DEP as an overarching strategy has twelve objectives which, collectively, will facilitate the development of improved eye care pathways, across all sub-specialties where appropriate, from primary care through to specialised secondary care utilising the expertise of a varied skill mix. These pathways will be integrated and supported by the use of optimal technologies and seamless communication between those providing the care. The resultant will be a patient-centred service with emphasis on clinical leadership, training and development giving improved patient experience and outcomes. One of the DEP objectives (objective 9) specifically addresses the acute eye care pathway.

DEP Objective 9 states:

"A regional pathway will be developed for the diagnosis and management of the "acute eye" across the primary, community and hospital interfaces. This pathway will need to consider how best to maximise resources-both human and financial-and be commissioned and delivered within an appropriate governance framework".*

**acute non-sight threatening eye*

Developing Eyecare Partnerships Task Group 4 is chaired by the Belfast Health & Social Care Trust (BHSCT) Clinical Director for Ophthalmology and has responsibility for Objective 9. Task Group 4 has multidisciplinary stakeholder representation and has membership drawn from the following groups:

- ✓ Service users
- ✓ Ophthalmic clinicians (primary care and secondary care)
- ✓ Commissioners
- ✓ Voluntary sector
- ✓ Academic sector
- ✓ Ophthalmic services in the Health and Social Care Board

The work of Task Group 4 in relation to Objective 9 has been informed by information from analysis of activity in secondary care in regard to the eye conditions being referred to Ophthalmology Outpatient Clinics and the Regional Acute Eye Service (now Eye Casualty) [3].

This analysis indicated that approximately 15% of conditions might be safely and successfully managed in primary care. An earlier audit in 2010 of attendances at Eye Casualty suggested that as many as 59% of the patients attending did not have acute, potentially sight threatening conditions and therefore, did not need to be seen as 'urgent' appointments in Eye Casualty. Other studies support these Northern Ireland findings; an audit in 2001 in the Dublin Eye and Ear Hospital suggested that between 60 and 70% of cases presenting in A & E were deemed 'non – urgent'[4].

The evidence from this has supported and informed the review of the Acute Eye Care Pathway by Task Group 4. The review identified that the current pathway was unnecessarily complex, potentially confusing for patients, included areas where duplication could occur, did not make optimum use of the skills and knowledge of primary care optometrists and patient experience was not measured. The review highlighted the need for a streamlined service addressing the needs of:

- The patient - to ensure that they were receiving prompt and appropriate care resulting in good clinical outcomes and experience.

- The primary care practitioners - to ensure that all involved have clear and definitive pathways to follow.
- Secondary care ophthalmology - to ensure that the best use is being made of clinical expertise and resources.

DEP and the plan for eye care services are aligned with 'Transforming Your Care'[5] in that the patient should be seen by the right person, in the right place, at the right time.

2.2 Other UK Regions

A review of models of care for acute non-sight threatening eye conditions highlighted the use of Primary Eye Care Acute Referral Schemes (PEARS) operational in parts of the UK for a number of years.

PEARS provides a primary care optometric intervention service for patients with sudden (acute) onset eye conditions and audit of these UK wide services have shown such schemes to be effective in managing patients with acute eye problems in the community setting. In the Welsh PEARS[6] scheme the majority (76%) of patients accessing the service were managed in optometric practice with only 24 % requiring referral to secondary care. Similar results have been found in other areas as shown in Table 1 below.

UK Area	Patients managed in optometric practice	Patients referred to secondary care
Wales PEARS[6]	76%	24%
Hull PEARS[7]	79%	21%
Stoke & North Staffs PEARS[8]	75%	25%
NHS Bromley CCG PEARS[9]	79.4%	20.6%

Table 1: Comparison of PEARS schemes in the UK.

2.3 Why a SPEARS Pilot?

Whilst it was therefore recognised that optometrists in Northern Ireland were well placed to provide this primary care service for patients presenting with sudden, acute onset, eye conditions there are certain restrictions under current General Ophthalmic Services (GOS) Regulations around when, and which, patients are eligible to be seen by an optometrist. For example, someone presenting with a red eye a few weeks after a full GOS eye examination will not be eligible for a further GOS examination and instead may have to pay for a private optometric examination, be referred back to their GP for investigation and management, be referred to secondary care or be seen under the goodwill of the practice.

Considering this and other models across GB, in conjunction with the current NI pathway for patients with acute non-sight threatening eye conditions Health and Social Care Board commissioners, supported by DEP Task Group 4, agreed that the PEARS model should be tested in Northern Ireland.
The following drivers for change were noted:

- Current ophthalmology demand-capacity gap
- DEP Objective 9
- The review of the current pathway - information and evidence from Northern Ireland
- Review of schemes in the UK
- Acknowledgment that primary care optometrists having the core skills, knowledge and diagnostic equipment, are well placed to provide assessment and management of patients with minor non- sight threatening conditions or, triage for appropriate onward referral for those patients with more serious potentially sight threatening conditions
- Accessibility of optometry practices which are situated in all main towns in NI. Patients in Northern Ireland have good local access to primary care ophthalmic services

It was decided to test the PEARS model by running a pilot in an area within Northern Ireland and hence the Southern Primary Eyecare Assessment and Referral Pilot service (SPEARS) was developed.

This report provides information on the planning, delivery, management and outcomes of the SPEARS pilot service for the one year period 1st September 2014 to 31st August 2015.

3. Aim and Objectives

The aim of the SPEARS pilot was to demonstrate that a primary care based optometric service could effectively and safely manage patients with acute non-sight threating eye conditions thereby reducing demand GPs and secondary care, and facilitating care closer to home for patients.

The objectives were:

- To establish an optometric primary eye care intervention service for patients in the Armagh/Dungannon locality within the Southern LCG. To ensure that the service enabled accredited optometrists to either:
    a) Assess and manage those patients presenting with minor, non-sight threatening acute (sudden onset) eye conditions
    b) For patients presenting with more serious, potentially sight threatening, conditions assess and triage them for appropriate and timely onward referral
- To make use of, and optimise, the existing skills of primary care optometrists to enable patients to be managed in a timely manner in their local area
- To facilitate appropriate access to eye care thereby better managing the capacity for ophthalmology services both within the SHSCT and BHSCT Eye Casualty by the reduction in unnecessary referrals to secondary care eye services

- To assist in the promotion of self-care for self-limiting eye conditions and anti-microbial stewardship thereby reducing the prescribing of ophthalmic drugs for minor eye conditions
- To improve inter-professional communication, relationships and awareness of professional services between

    a) Primary care practitioners – GPs, pharmacists and optometrists

    b) Primary care and secondary care

The above objectives would be evaluated on the following aspects of care provision:

- ✓ Access to Service
- ✓ Service Quality
- ✓ Service Safety
- ✓ Cost Effectiveness
- ✓ Patient Experience

The elements of Service Quality and Service Safety are reported on in the context of *Patient Management and Safety*. All of the above would provide evidence to enable commissioners to plan for future development of the regional Acute Eyecare Pathway.

4. Development and Management of the SPEARS Pilot

4.1 The Locality

The area chosen for the SPEARS pilot was the Armagh/Dungannon locality of the Southern LCG area. This locality is largely rural with two main towns and five smaller towns all with optometry practices. It is at a significant distance from the main ophthalmology centres in Belfast and Londonderry.

The Armagh/Dungannon locality encompasses an area 1443 km^2 and has a population of 120,904[10]. This locality is serviced by the following primary care health care services:

- 20 optometric practices
- 23 GP practices (67 GPs)
- 31 community pharmacies

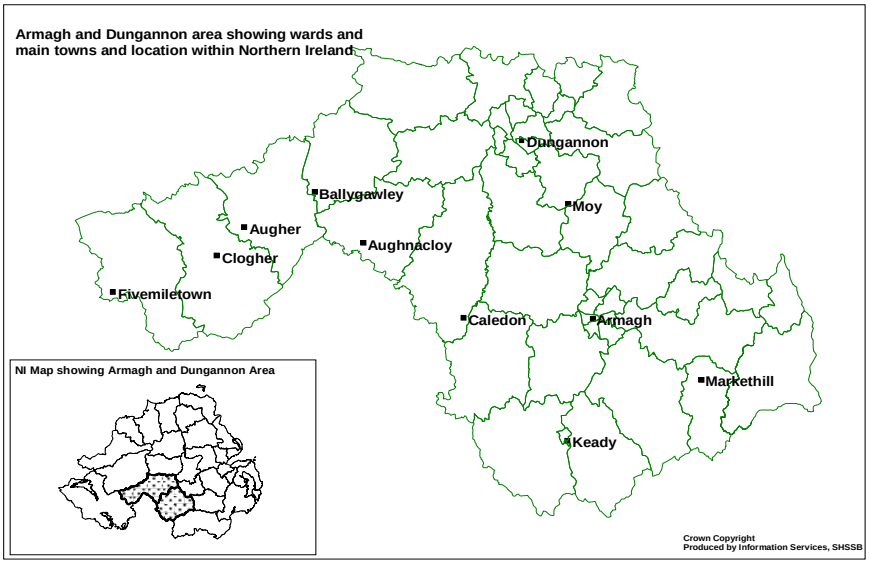

Figure 2: Map of the Armagh/Dungannon Locality and its location within Northern Ireland

4.2 Service Planning

4.2.1 Planning Proposal

In acknowledgement of the drivers for change, identification of need and following the presentation of evidence and information as outlined in Section 2, an investment proposal was put forward for consideration by the Southern Local Commissioning Group (LCG). Funding was approved for a one year SPEARS pilot and the service specification was proposed by ophthalmic services and agreed with the LCG and the representative body for optometrists in Northern Ireland, Optometry Northern Ireland (ONI).

All optometrists working in practices in the locality were invited to participate in the pilot and in total 16 optometrists in 12 practices agreed to take part.

The practices were located in the following towns:

Town	Number of practices providing SPEARS
Armagh	3
Keady	1
Moy	1
Dungannon	1
Coalisland	2
Clogher	1
Fivemiletown	1

Table 2: Location of practices with SPEARS accredited optometrists

The only town in the locality without a SPEARS accredited optometrist was Markethill but, due to its proximity to Armagh and Keady, both of which had practices offering SPEARS, access was not anticipated to be detrimentally affected.

4.2.2 Training and accreditation

The skills required are part of optometrists' core competency skills, applied and utilised in day to day professional practice.

However it was deemed important from a quality assurance perspective that all the optometrists participating in the SPEARS pilot should undertake a training and assessment programme, specific to the 'acute eye'. The purpose was to facilitate a revision and update of skills and the demonstration of the required level of competency.

Successful completion of this training and assessment would render the optometrist accredited to provide the service.

The training and assessment was commissioned by the HSCB and delivered by the Welsh Optometric Postgraduate Centre (WOPEC).

- Training:
  - Seven distance learning modules with MCQs tests
  - A practical workshop on specific investigative techniques delivered in the HSC eye clinic of Armagh Community Hospital
- Assessment: Practical OSCE style assessments with WOPEC assessors were held in August 2014 in South Tyrone Hospital

4.2.3 Service Specification and Requirements

A Local Enhanced Service (LES) specification was drafted and agreed as the service was being provided as a commissioned service i.e. outside of GOS. Participating SPEARS accredited optometrists were required to sign the LES agreement detailing the service specification.

The service specification included guidance on professional and clinical matters which was supported by references to the College of Optometrists Code of Ethics and Clinical Guidelines[11]and Clinical Management Guidelines[12].

I. Patient Eligibility

The service was provided free of charge to patients who are registered with a General Medical Practitioner (GP) in Northern Ireland and therefore have a current Health and Care Number (HCN), AND who present with sudden onset of acute eye related problems and are not due for a routine GOS or private Sight Test. Full inclusion/exclusion criteria are shown in Appendix 1.

II. Access

Patients could self-refer to a participating optometrist or be referred by their GP or community pharmacist. Optometrists were required to offer the patient an appointment within 48 hours of being referred.The GPs and community pharmacies in the Armagh/Dungannon locality were provided with guidance on the referral criteria, a list of the accredited practices, a patient information sheet and a SPEARS poster to display in their reception area. These supporting materials are included in Appendices 2 and 3.

Other than the resources noted above, no additional service promotion was undertaken because of the limitation of the pilot duration.

III. Monitoring

Optometrists were required to maintain full and accurate records of each SPEARS assessment and to complete a SPEARS Assessment Outcome and Claim form for each patient seen (Appendix 4). This form was submitted to the southern office of the HSCB for data collection and processing of the claim for payment. The claim form was reviewed and approved for payment by the optometric adviser and data logged from each form for assurance and evaluation of service.

IV. Service Remuneration

Pilot service remuneration to the optometrists was agreed following consultation with Optometry Northern Ireland, and banded into agreed fees for first presentation, and follow-up review appointment.

V. Service Initiation

The pilot commenced on 1st September 2014 to run for one year to 31st August 2015 with 16 optometrists in 12 practices accredited.

To note, additional funding was approved to extend the pilot until 31st March 2016 to enable full evaluation to be carried out without a break in service provision.

5. Service Evaluation Methodology

The pilot was operational, from 1st September 2014 – 31st August 2015 and has been evaluated on the following elements of care provision:

- ✓ Access to Service
- ✓ Patient Management and Safety
- ✓ Patient Experience
- ✓ Cost Effectiveness

Three methods of evaluation were applied:

a) Data analysis – to assess access, patient management and cost effectiveness.

Data was captured and analysed from information provided on the SPEARS Assessment Outcome and Claim Forms submitted for each patient who received a SPEARS assessment. Information was collated for all patients who accessed the service during the pilot. The data includes information on referral sources, diagnosis and outcomes. It was recorded on a database established and maintained in line with information governance requirements.

b) Patient experience questionnaire – to evaluate access, patient management and patient satisfaction.

A Questionnaire (Appendix 5) was issued, on behalf of the HSCB, by the optometrists to all patients receiving a SPEARS assessment over the 3 month period May – July 2015. Patients were encouraged to complete the questionnaire independently at home, not in the practice, and post them back to the HSCB. The questionnaire also asked patients to indicate if they would be willing to receive a follow up telephone call from HSCB staff. This failsafe mechanism was required as it was likely that the questionnaire would be completed within a few days of the patient having seen their optometrist when the outcome of their condition may not have been completely resolved. A follow up phone call 2-3 weeks later allowed a better assessment of whether the optometric management had resolved the patients' problems or whether they had to seek further intervention.

c) Clinical audit – to assess patient management and patient safety.

A random sample of clinical records of SPEARS assessments were requested from each practitioner. A sample size of 30% was agreed following consultation with staff in the information unit in the Business Services Organisation. The sample from each practitioner was in proportion to their SPEARS activity with a minimum of 10 records and a total sample of 256 records. All records were anonymised and coded for review by a consultant ophthalmologist.

The clinical audit had two objectives:

1. To assess the appropriateness and safety of the actions taken by the optometrist providing the SPEARS assessment.

2. To examine the 256 patients in the sample to determine if any patients had also attended secondary care. This review included:

i. Follow-up of patients who were *referred* to Eye Casualty by their optometrist following their SPEARS assessment
ii. Follow-up on patients who were managed *solely* within optometric practice to ascertain if they subsequently required ophthalmology input i.e. that the initial optometric management did not resolve the patient's eye problems

6. Findings and Outcomes

From 1st September 2014 to 31st August 2015 **861** patients with acute, sudden onset, eye problems attended an accredited optometrist for a First SPEARS assessment. In addition **101** follow-up SPEARS assessments were provided to patients who required a follow up. Therefore a total of **962** SPEARS assessments were delivered during the pilot.

6.1 Patient Profile

6.1.1 Age

The youngest patient seen was 4 years old and the oldest 100 years old with the majority, 48%, being 60 years and over, as shown in Figure 3.

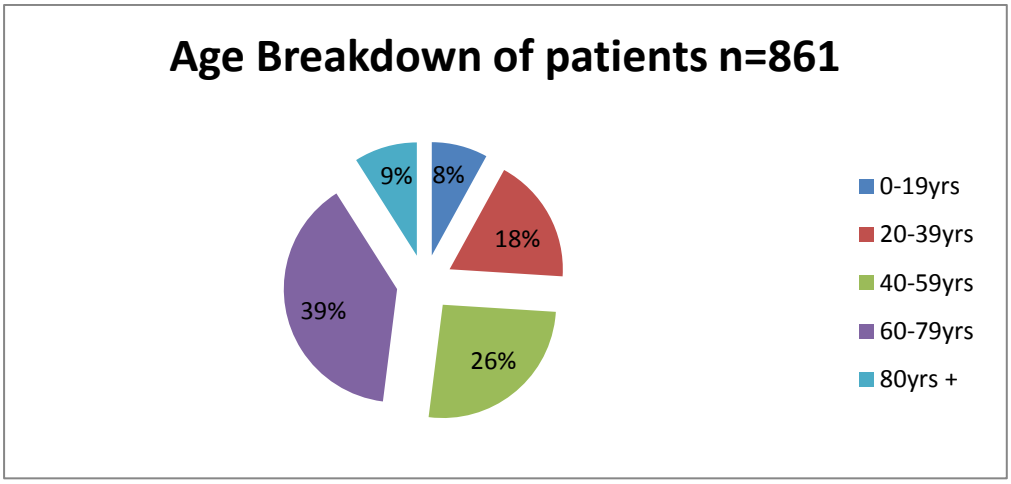

Figure 3 Analysis of age demography of patients accessing SPEARS (n=861)

6.1.2 Gender

Of the 861 patients who accessed SPEARS in the pilot period 61.2% were female and 38.8% were male which correlates with gender analysis from the NI Sight Test Survey[13].

6.2 Access to Service

6.2.1 Referral sources

Evaluation of the data on origin of referral evidenced the following:

- **GP Registration**
  - 93% i.e. majority of patients were registered with GPs in the Armagh/Dungannon locality
  - 3% were registered with GPs in the bordering southern LCG locality of Craigavon/Banbridge
  - 4% with GPs in the Western LCG and Belfast LCG. These may be patients working in the Armagh/Dungannon locality

- **Referral Source**
  - 74.5% self - referred i.e. they chose to go to their optometrist rather than another clinician.
  - 16.7% were referred by their GP
  - 5.8% were referred from their community pharmacist
  - A small number were referred from other sources e.g. GP out of hours service

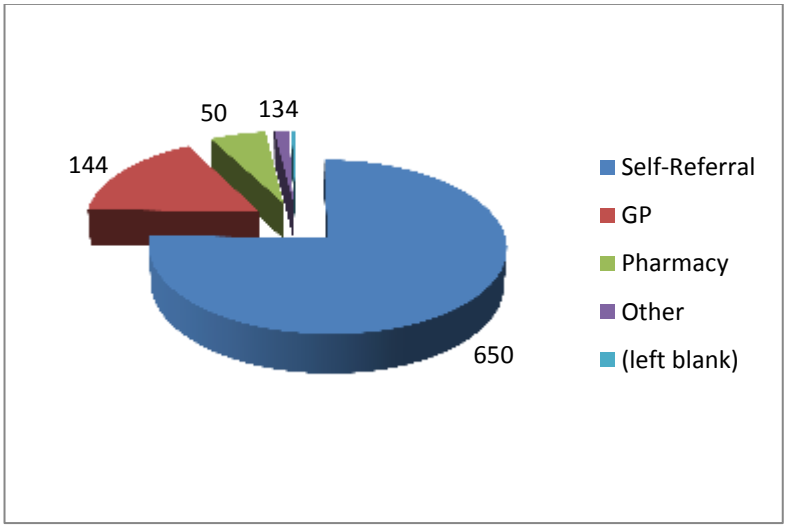

Figure 4: Referral sources for all SPEARS Assessments n=861

The number of patients referred by GPs slowly but steadily increased during the twelve months. Feedback from one GP practice advises that the surgery now does not provide appointments for any patient presenting with eye problems but directs them straight to their primary care SPEARS accredited optometrist.

6.2.2 Distance travelled

Over 69% of patients reported that they lived within 5 miles of the optometry practice which they attended for their SPEARS assessment.

This information was provided in the patient questionnaire and the full breakdown for these responses (n=56) is shown in Figure 5.

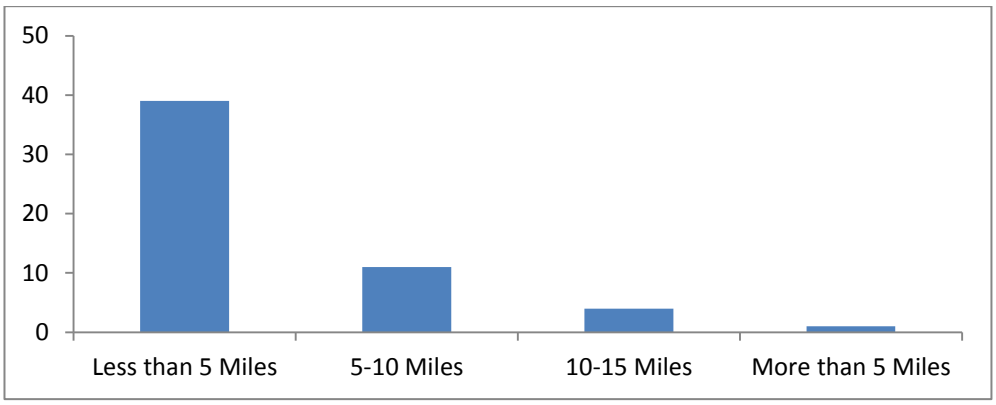

Figure 5: Distance travelled by patient to access SPEARS (n=56)

Responses to qualitative questions in respect of accessibility of the service indicated that 84% felt the optometry practice was very convenient for them and no one reported it to be inconvenient.

6.2.3 Appointment Availability

The majority of patients were seen by their optometrist on the same day that they were referred and 100% were offered appointments within 48 hours.

Outcome Discussion: Patient Profile and Access to Service

Optometry practices are located in all moderate sized towns in Northern Ireland with good physical access. The pilot evidences both from the SPEARS activity data and the patient experience questionnaire that the SPEARS pilot provides good access to primary eye care for assessment and triage of sudden onset eye problems. 48% of patients attending for a SPEARS assessment with a sudden problem were aged 60 years and older and for this group of patients local access to appropriate services is very important as they are often less mobile with co morbidities and are more dependent on others for help with travel.

Access to a primary care service for acute non-sight threatening eye conditions would allow greater independence for older people in the management of their own condition. The LES protocol requires the practice to offer an appointment for acute eye assessment within 48 hours which was achieved for all patients. This requires practice management organisation to ensure there is the facility to offer same or next day appointments for these patients requiring unscheduled care.

6.3 Patient Management and Safety

The evaluation of overall patient clinical management examined and analysed aspects of the care pathway from presentation at primary care optometric practice through to discharge or, onward referral to secondary care where required.

This included evaluation of:

6.3.1 Presenting symptoms

6.3.2 Optometric diagnosis

6.3.3 Optometric management

I. Analysis of all SPEARS assessment outcomes
II. Analysis of GP SPEARS referral outcomes

6.3.4 Optometric treatment

6.3.5 Optometric referrals

I. Analysis of Eye Casualty referral outcomes

6.3.6 Outcomes following optometric discharge

I. Follow-up of Secondary Care attendances
II. Patient reported outcomes

6.3.7 Inter-observer agreement on clinical outcomes

6.3.1 Analysis of Presenting Symptoms

Information from the SPEARS Assessment and Outcome forms was analysed in relation to presenting symptoms. The findings of this analysis are shown in the Figure 6. The most common presenting symptom was a ‘red eye’ (38% of all attendances).

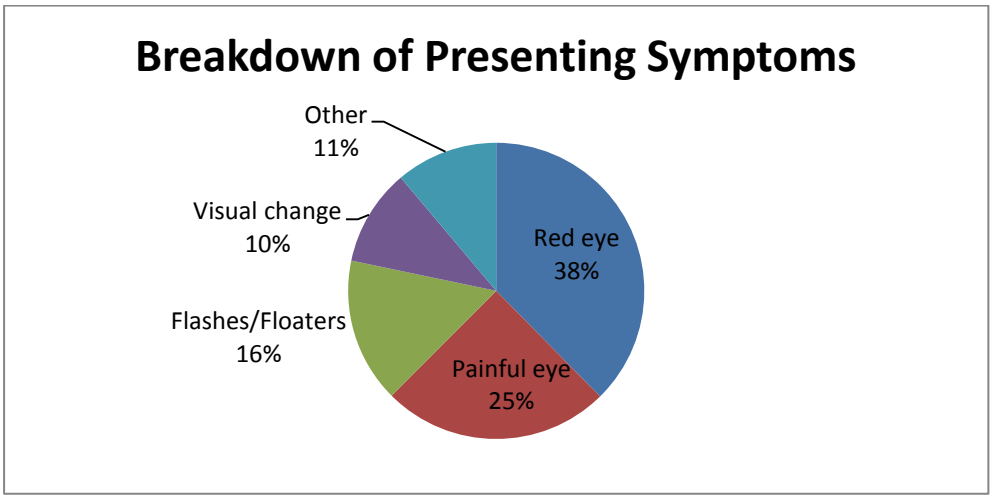

Figure 6: Analysis of the Classification of Presenting Symptoms

6.3.2 Analysis of Initial Optometric Diagnoses

The SPEARS Assessment and Outcome form facilitated the classification of initial optometric diagnosis via a selection of tick boxes. Analysis of the information on optometric diagnosis evidenced that the most commonly presenting conditions were non-sight threatening eye conditions such as conjunctivitis and dry eye and more seriously “flashes and floaters” which can be associated with a serious sight threatening condition. A category of “Other” covered the less common, more serious potentially sight threatening conditions. SPEARS accredited optometrists were required to record these in free text. A comprehensive breakdown of diagnoses is shown in Table 3, Figure 7 and Table 4.

Ophthalmic Condition	Number of presentations	% of SPEARS Presentations
Flashes/Floaters	136	15.8 %
Dry Eye	134	15.6%
Conjunctivitis	118	13.7%
Sub conjunctival haemorrhage	66	7.7%
Corneal foreign body	55	6.4%
Corneal abrasion	54	6.3%
Blepharitis	51	5.9%
Chalazion/Hordeolum	31	3.6%
Trichiasis	26	3%
Episcleritis	13	1.5%
Entropion/Ectropion	3	0.3%
Other	169	19.6%
No Condition observed	5	0.5%
Total diagnoses	**861**	**100%**

Table 3: Analysis of Initial Optometric Diagnosis n=861

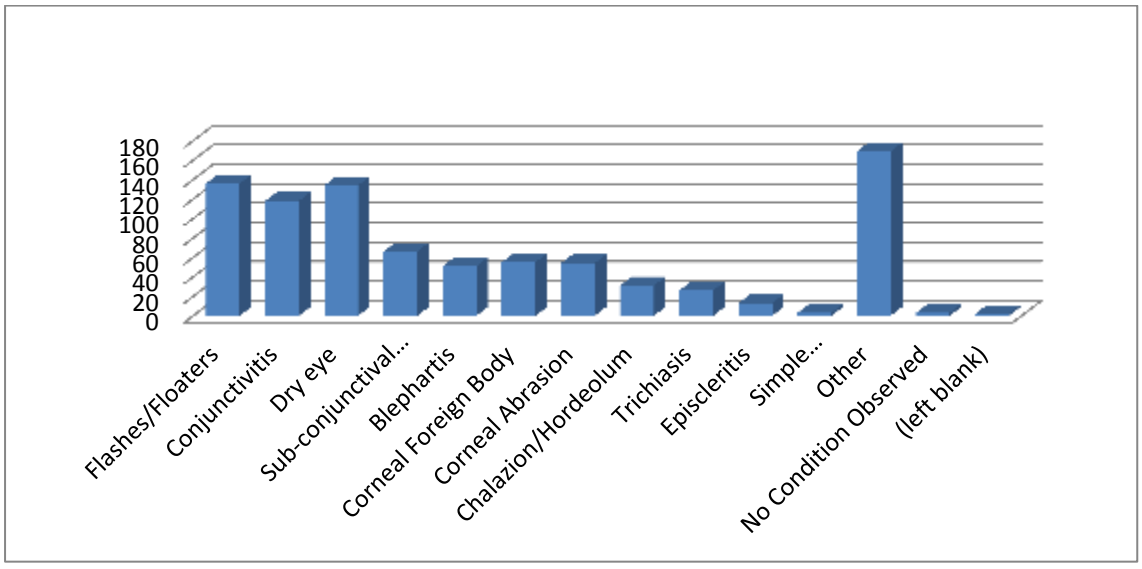

Figure 7: Graphical Representation of Initial Optometric Diagnosis n=861

"Other" Diagnoses		
Ophthalmic Condition	Number of Presentations	% of SPEARS Presentations
Retinal	25	2.9 %
Cataract	12	1.4%
Inflammation	21	2.4%
Corneal - Keratitis	6	0.7%
Corneal - other	16	1.9 %
Ocular Migraine	25	2.9%
Trauma	11	1.3%
Miscellaneous	53	6.1%
Total "Others"	169	19.6%

Table 4: Analysis of "Other" Diagnoses

The "miscellaneous" diagnosis category included conditions that presented very infrequently e.g. acute angle closure glaucoma, suspected basal cell carcinoma; diagnoses associated with systemic causes e.g. episodes of loss of vision, suspected nerve palsies; and symptoms for which no optometric diagnoses could be made.

6.3.3 Analysis of Optometric Management

I. Analysis of all SPEARS assessment outcomes

Following assessment patients were either managed by the optometrist if their condition was minor and non - sight threatening e.g. conjunctivitis, minor foreign body or triaged for onward referral if their condition was more serious and potentially sight threatening as shown in Table 5.

Outcome	Management	Number	%
Managed in optometry practice	Discharged with advice following assessment	356	41.3% (n=861)
	Given treatment	339	39.4%
	Required follow up appointment	101	11.7% (n = 861)
	Full sight test booked	7	0.8%
	Total managed in practice	**695**	**81.5%**
Referred	Secondary care	102	11.8%
	GP	40	4.6%
	Other	14	1.6%
	Total referred on to other healthcare provider	**166**	**18%**

Table 5: Analysis of Optometric Management of SPEARS Presentations

Overall **81.5 %** of patients were managed in primary care optometric practice. Of these 11.7% required a follow-up appointment which is in line with similar services in other parts of the UK[6,7,8,9,]

II. Analysis of GP SPEARS referral outcomes

In total 144 patients (16%) were referred by their GP for a SPEARS assessment. The outcomes for this group of patients, shown in Table 6, were consistent with the outcomes for the entire SPEARS activity in the pilot period.

Outcome	Management	Number	% of total
Managed in optometry practice	Discharge with advice following first assessment	59	41.6% (n= 144)
	Given treatment	54	37.5%
		113	80.1%
Referred	Secondary care	15	10.6%
	Back to GP	13	9.2%
	Private ophthalmologist	1	0.7%
Not recorded		2	
Total		144	

Table 6: Outcomes for Patients Referred to SPEARS by GP

2-3% of all GP consultations are patients with eye related problems[14] The GPs in the pilot area have been very supportive of the pilot and have increasingly referring patients to the service.

Comment from General Practitioner in Armagh on the SPEARS Pilot

"SPEARS is an excellent service. We have good relationships with our local optometrists and patients presenting with acute, sudden onset, eye problems are now redirected by our reception staff for a SPEARS assessment without the need to see the GP first"

6.3.4 Analysis of Optometric Treatment

Patient self-help is strongly encouraged by optometric practitioners. The 41.6% of patients discharged following a first SPEARS assessment will have been given advice and a condition leaflet to assist them in understanding and managing their condition.

For example patients presenting with dry eye conditions frequently have a co-existing meibomian gland dysfunction and these patients are educated on lid hygiene and given relevant literature on managing their dry eye condition.
Of the 118 patients who presented with symptoms of flashes and floaters following SPEARS assessment only 12% were referred to secondary care. The majority of patients were discharged following their SPEARS assessment with guidance and literature on the signs and symptoms of retinal detachment including advice to seek urgent attention either from their optometrist or Eye Casualty if their symptoms changed or worsened.

For the 37.4% patients who required treatment in primary care, a variety of ophthalmic treatments were provided by SPEARS accredited optometrists. These included:

- Removal of simple foreign bodies (Of the 55 patients with foreign bodies, 14 had deeper-embedded foreign bodies and required onward referral to the Minor Injuries Unit in Dungannon (5 patients) or to Eye Casualty in Belfast (9 patients).
- Eyelash removal in cases of trichiasis (ingrown lashes)
- Dry eye treatments including provision of ocular lubricants and lid hygiene treatments
- Provision of antimicrobial treatment for acute bacterial conjunctivitis or for prophylactic treatment for corneal abrasions or following foreign body removal

If ocular lubricants or other ophthalmic medication e.g. antimicrobials or anti-inflammatories were recommended, the patient was usually directed to their community pharmacy to purchase the treatment over the counter. If the patient required the treatment to be provided on NHS prescription they were given a prescription request form to take to their GP (if the medication was listed in the SPEARS specific formulary). For any other medication the optometrist wrote to the GP giving a recommendation for prescribing. **This somewhat convoluted method of obtaining topical ophthalmic treatments in order to manage the condition was noted in the patient experience questionnaire and accounted for the only negative feedback (from two patients) on the overall service.**

These patients commented that having to go to their GP to have their prescription issued following their SPEARS assessment added an additional burden for them and delayed the commencement of treatment.

The availability and use of Independent Prescribing optometrists within the SPEARS service or, the use of a patient group directive would have been beneficial in 37.5% of the cases.

Either of these options would have relieved the prescribing problem as NHS prescriptions could have been issued to the patient at the time of the assessment thereby improving access to therapeutic treatment for the patients and further reducing the need for GP involvement.

Anti-microbial prescribing for bacterial conjunctivitis has been much reported on. The majority of cases are self-limiting and the use of antimicrobials reduces the severity of symptoms and quickens resolution time[15].The optometric emphasis on patient education should contribute to a reduction in the level of antimicrobial prescribing through allaying the patient's fears about their condition and managing their expectation with regards their need for treatment.

6.3.5 Analysis of Optometric Referrals

From Table 5 it is observed that:

- 11.8% of patients were referred to secondary care. The majority of these were referred urgently to BHSCT Eye Casualty with some to the BHSCT Macular service, to the SHSCT Minor injuries Unit for foreign body removal, and one to each of Craigavon Area and Altnagelvin Area Hospitals
- 4.6% were referred to their GP; these patients had conditions that were suspected of having a systemic origin e.g. vascular problems or where no ocular diagnoses could be made
- 1.6% were referred elsewhere including privately to ophthalmology at the patient's request

I. Analysis of Eye Casualty Referrals

256 patient clinical records were sampled for audit of clinical outcomes. Of these 46 were referred to other healthcare providers by their optometrist following their SPEARS assessment and the outcomes for these patients were reviewed an ophthalmology trainee doctor.

Of these 256 patients:

- 9.7% (25/256) were referred to Eye Casualty by their optometrist. Following Eye Casualty assessment:
    - 13 were subsequently seen for review/ follow up at either eye casualty or an ophthalmology outpatients clinic
    - 1 required for urgent ophthalmology surgical procedure
    - 1 referred on to vascular surgery department
    - 6 required no follow-up
    - 6 who were referred did not attend Eye Casualty (DNA)

- 8.2% (21/256) were referred to other health care services by their optometrist including their GP, Minor Injuries Unit, private ophthalmologist. Of these patients:
    - 7 subsequently required HES ophthalmology input (3 directly)
    - 2 attended Eye Casualty

6.3.6 Analysis of Clinical Outcomes Following Optometric Discharge

This aspect of the service has been analysed to assess whether the optometric management resolved the patient's problems or whether the patient had to seek further intervention.

It was evaluated by two methods:

I. Follow-up of secondary care attendances
II. Patient reported outcomes provided in the patient experience questionnaire responses

I. Follow-up of Secondary Care Attendances

In the clinical audit sample of 256 patients, 210 patients were discharged from the optometrist following their SPEARS assessment. Two of these patients subsequently attended Eye Casualty and a third entered secondary care through another route, undergoing retinal detachment surgery. High level examination of the data therefore suggests that 3 patients in the sample appeared not to have had a serious condition managed appropriately in optometric practice. It suggests a possible requirement for ophthalmological intervention with the possibility that one patient with a retinal detachment had a "missed" diagnosis by the optometrist. However further investigation revealed that this patient had been referred to an ophthalmologist privately following their SPEARS assessment (*at the request of the patient*) however this patient should probably have been referred urgently to Eye Casualty rather than through a private referral which delayed ophthalmological investigation.

In summary it can be stated that only 3/256 (1.17%) of patients required further, secondary care, intervention following management by the SPEARS accredited optometrist.

II. Patient Reported Outcomes

To determine if the optometric management had resulted in resolution of the patient's condition they were asked whether their condition had improved, was unchanged or had worsened following their SPEARS assessment. The responses are shown in Figure 8.

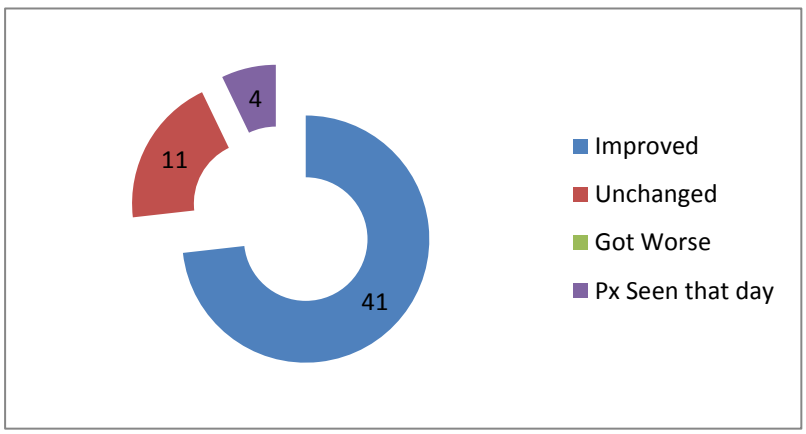

Figure 8: Patient Self-Reported Outcomes

- 41 patients(73%), reported that their condition had improved
- 11 (9.6%) reported it unchanged
- No patients (0%) reported worsening
- 4 patients reported that they were completing the questionnaire on the day of assessment and therefore did not yet know the outcome

It had been anticipated that some patients may complete the questionnaire shortly after their SPEARS assessment and the outcome regarding resolution of their condition may be known at that point. A question was included asking the patient if they would be agreeable to receiving a follow up phone call from an HSCB staff member 2-3 weeks after their SPEARS assessment to further review their condition status 28 patients indicated that they would be happy to receive a follow up phone call and provided contact numbers. Of these patients 16 (28%) had a follow up phone call.

Follow up telephone interview re: outcome and status of condition

Of the 16 patients contacted by HSCB staff:

- 13 (81.3%) reported that their condition had improved
- 3.1 (8.7 % that it was unchanged
- No patients (0%) had got worse.
- 3 patients reported that their condition had not improved. Of these 2 had returned to their optometrist for further investigation and 1 had not done anything further.

In summary the clinical outcomes from the patient's perspective are very encouraging with approx.77% of patients reporting their condition had improved and none (0%) reporting that it had worsened.

6.3.7 Inter-observer Agreement on Clinical Outcomes

A sample of 254 clinical records, (2 were unavailable), was reviewed by a consultant ophthalmologist to assess the '*appropriateness'* of the following elements of service provision and ophthalmic care provision:

- Referral (i.e. Attendance) for SPEARS assessment
- The optometric investigation

- The optometric management and treatment
- Triage for onward referral

4 records could not be evaluated due to illegibility therefore 250 records were audited. The findings are detailed in Table 7.

	Clinical Audit Question	Appropriate	Inappropriate
1.	Was attendance for SPEARS assessment appropriate?	242/250 (96.8%)	6/250 (2.4%)
2.	Was the optometric diagnosis appropriate? *Note: 13/250 not clearly documented therefore n= 237*	234/237 (98.7%)	3/237 (1.2%)
3.	Was the optometric investigation appropriate?	245/250 (98%) *Comments:* *i) In some cases OCT & visual fields performed unnecessarily* *ii) In one case, use of dilation would have improved management*	5/250 (2%) unable to determine if appropriate as poorly recorded
4.	Was the optometric treatment appropriate?	241/250 (96.4%)	9/250 (3.6%) *Comments:* *i) In six cases treatment plan was not documented.* *ii) In two cases antibiotics should have been prescribed* *iii) In one case patient was referred privately but should have been referred to RAES*

5.	If patient referred was this an appropriate management decision?	45/249 referred *Note: in 1 case management not documented so n=249* 39/45 (86.6%) referrals appropriate *i) 20/45 (44.4%) to Eye Casualty* *ii) 4/45 (8.8%) to alternative Acute service* ▪ *3 Minor injuries unit,* ▪ *1 to local A&E* *iii) 21 referred to GP or other HES*	6/45 inappropriate *Comments:* *i) 2 patients did not require Eye Casualty referral* *ii) 3 sent to Minor Injuries Unit with foreign bodies could possibly have managed in practice.* *I patient with deep FB should have been sent directly to Eye Casualty.*
6.	Were any patients not referred who should have been?		4/250 (1.2%) patients should have been referred. Comments: i) 1 px with trauma should have been referred ii) 2 contact lens wearers should have been referred. iii) 1 px at first assessment referral indicated but instead was given a follow up appointment by the optometrist. Had improved at review.

Table 7: Findings of the review of clinical records by consultant ophthalmologist

In summary the clinical audit and review of clinical records evidenced that presentation for assessment and the subsequent optometric investigation and management were appropriate in the vast majority of cases. The audit demonstrated excellent inter-observer agreement in regard to the initial diagnosis, clinical investigations, and clinical management. The limitation of this audit was that the review was of paper based clinical records and dependant on the standard of record keeping by the individual optometrists. While a more precise comparison may be obtained from examination of the patient by both clinicians evidence from similar inter-observer audits involving examination of the patient support the findings of this SPEARS audit, for example in 2006 Haus[16] et al found a 93% agreement in diagnosis and management between optometrists and ophthalmologists for patients attending an A&E department.

The outcome of the clinical audit adds to the body of evidence validating the aim of the SPEARS pilot which was:

'To demonstrate that a primary care based optometric service could effectively and safely manage patients with acute non-sight threating eye conditions thereby reducing demand on secondary care and facilitating care closer to home for patients'

The audit of clinical records also provided feedback on areas for learning and service improvement. It was recommended that clinical record keeping should be reviewed placing more emphasis on concise documentation with clear recording of diagnosis, the treatment plan and the advice given to the patient. In addition any deviation from the recommended management should be clearly documented e.g. if a patient requests a private referral when urgent referral to Eye Casualty would be indicated. The clinical audit found that particular care should be taken with contact lens wearers presenting with acute problems and the determination of need for an ophthalmology opinion.

These areas of service improvement could be addressed by updating the SPEARS service specification with the inclusion of specific requirements including:

- ✓ A definitive dataset for clinical records of SPEARS assessments
- ✓ Peer review sessions for clinicians
- ✓ Further training in specific clinical techniques e.g. for foreign body removal
- ✓ Sessional attendance at 'teach and treat' clinics in Eye Casualty or Emergency Eye Clinics within the acute setting
- ✓ Tele-mentoring and structured engagement for clinicians e.g. utilising the model of Project ECHO

.

Outcome Discussion: Patient Management and Safety

As noted in Section 3 the quality and safety of the service was examined through an evaluation of the management of patients who accessed SPEARS. In determining the management of patients all aspects of patient care and contact along the patient pathway were evaluated from initial contact with the SPEARS accredited optometrist to the outcome and end-point. .

In examination of the evidence from the audit the following highlight points can be stated:

1. For the vast majority of patients, primary care optometric intervention through SPEARS appeared to address and adequately deal with their sudden onset ophthalmic condition. This is evidenced from the patient reported outcomes and is further supported by the data on subsequent Eye Casualty attendances which indicated that only 0.9% of patients required urgent intervention following discharge by their optometrist.

2. The optometric management was appropriate in 96.4% of cases. This is evidenced in the outcomes of the clinical audit which demonstrated a high rate of inter-observer agreement on investigation, diagnosis, treatment and management of patients who accessed the service.

3. A primary care optometry based service for acute non-sight threatening sight conditions is a safe service providing appropriate and quality eye care to patients who require the service.

6.4 Patient Experience

As outlined in Section 5 (service evaluation methodology) a patient experience questionnaire was utilised to evaluate experience and outcomes. 100 questionnaires were issued during a three month period from May to July 2015 with a return rate of 56%. The objective was to provide independent information from the service user perspective including their views on ease of access (refer to 6.2.2), condition outcome (refer to 6.3.5) and their overall satisfaction with the service.

Analysis of the questionnaire returns evidence of high patient satisfaction with 51 patients (87%) reporting that they were 'extremely satisfied' with the service. There were no reports of 'dissatisfaction'. The findings are represented in Figure 9.

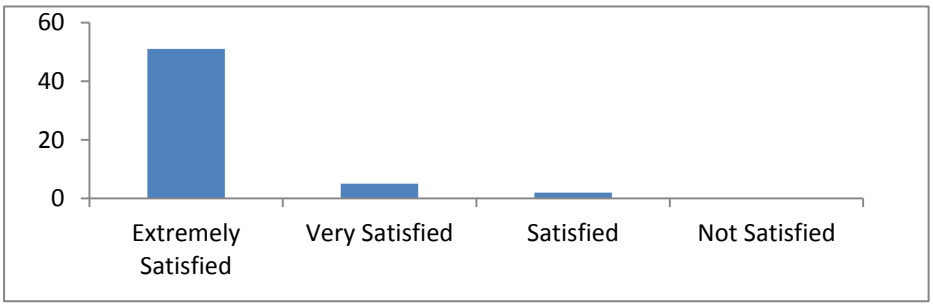

Figure 9: Analysis of Level of Patient Satisfaction n=56

In addition to the quantitative reporting of the level of satisfaction qualitative feedback was also evaluated. **Comments** from patients recorded on the **patient experience** questionnaires are noted:

Patient A…..

"It's good to know if you have an eye problem that you can get it sorted straight away rather than having to wait maybe 2 weeks to see your doctor"

Patient B……

"This is an excellent service. The optician had removed the foreign body in minutes and relief was immediate. If she was unable to help me I would have had to attend the Royal Hospital in Belfast almost an hour away"

Patient C……

"It's brilliant. Advice and re-assurance (and treatment if necessary) provided right away- no waiting and wondering and worrying about the condition"

Patients were asked if they would attend their optometrist again if they had a sudden onset eye problem and 54 patients **(96%)** responded that they would**.**

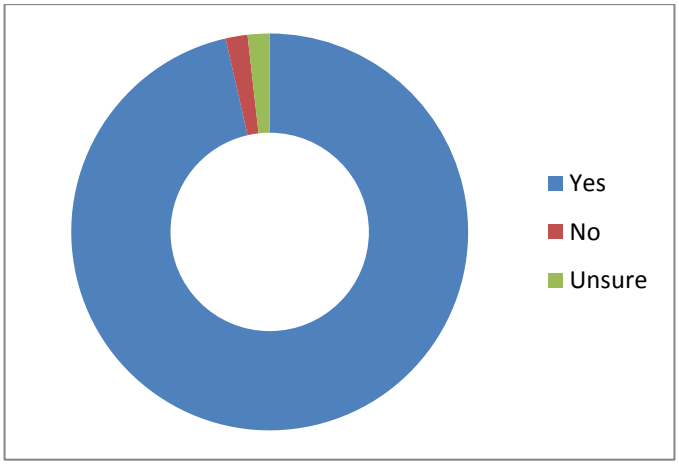

Figure10: Patients who would attend their optometrist again with a sudden onset eye problem.

In the absence of a SPEARS service:

- 53% advised that they would have attended their optometrist anyway
- 47% (36 patients) reported that they would have chosen to attend another healthcare provider and the majority of these stated that they would have attended their GP

These findings are noted in Figure 11.

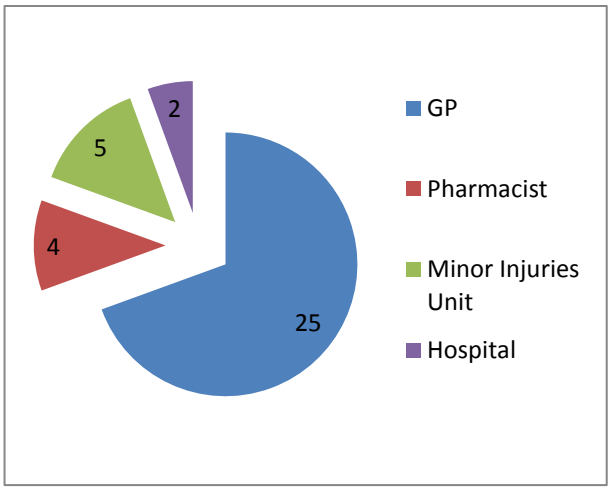

Figure11: Choice of non-optometric healthcare provider in the absence of SPEARS

Outcome Discussion: Patient Experience

The patient responses to the questionnaire indicate a high level of patient satisfaction evidenced by the high percentage who reported satisfaction with the service and the high percentage that would use the service again. The patient experience findings were also very positive for access and in regard to clinical outcomes.

6.5 Cost Evaluation

Analysis of the costs of the SPEARS Pilot is based on the costs incurred in relation to the following elements of service planning and delivery are noted in Table 8.

Service Component	Total Cost
SPEARS Optometrist Training and Accreditation (n=16)	£ 2,080 Capital i.e. non recurrent
Service Provision 1.9.14 to 31.8.15 Total Service Provision	£44,160
Ophthalmic Equipment	NIL
Administrative Costs Costs for managing claims and payments absorbed by HSCB/BSO for the period of the pilot	NIL
Total Cost of Pilot Service	£46,240
Overall Cost per Patient Accessing SPEARS assuming 11% follow up appointment rate	£51.29

Table 8: Costs of SPEARS Pilot 1.9.14 to 31.8.15

Potential Cost Benefit Realisation

Comparison of referrals to ophthalmology in 2014 and 2015 shows a significant reduction in 2015 in the locality where SPEARS is provided as shown in Table 9.

Comparison of Ophthalmology Referrals	
Locality	Variance
NI Regional Ophthalmology Referrals	5% **Increase**
Southern LCG Ophthalmology Referrals	**Stable**
Armagh/Dungannon locality Referrals	9% **Decrease**

Table 9: Variance in Ophthalmology Referrals for period Jan- Nov 2015 compared with Jan – Nov 2014

This 9% decrease in ophthalmology referrals in 2015 equates to 224 outpatient appointments saved.

The notional cost of an Ophthalmology Outpatient attendance in NI: £115.

Estimated saving for the SHSCT for the Armagh/Dungannon locality for the period Jan – Feb 2015, during which the SPEARS pilot was being provided = £25760.

Outcome Discussion: Cost Effectiveness

Evaluation of the patient management of this service has demonstrated that optometric care, including triage for any necessary onward referral, was safe and appropriate. Therefore the 9% reduction in referrals to secondary care is supported. The service releases capacity for GPs and secondary care both for ophthalmology outpatients and BHSCT Eye Casualty. The cost benefit of this primary care intervention service can be realised.

If it was rolled out LCG wide as a recurrently funded service wider promotion to patients would increase uptake in optometric primary care further reducing GP and secondary care involvement leading to more efficiencies.

Patients can access care more promptly, closer to home. This earlier intervention has the advantage of potential improved clinical outcomes and reduction in the need for more complex and costly management.

7. Conclusion and Recommendations

The SPEARS pilot was set up to test a model for management of minor non sight threatening eye conditions in primary care optometric practice and has proven to be successful. The outcomes of the pilot are positive for the four elements of care provision evaluated:

- ✓ Access to Service
- ✓ Patient Management and Safety
- ✓ Patient Experience
- ✓ Cost effectiveness

The evaluation has indicated that the service provides good access close to home for patients with acute, sudden onset, eye problems. The outcomes are in line with outcomes for similar services in other parts of the UK. The clinical audit has evidenced that the optometrists are providing safe and appropriate management of minor non sight threatening eye conditions and appropriate triage for onward referral for those patients with more serious, potentially sight threatening conditions. The patients, through their responses to the questionnaires, have shown a very high level of satisfaction with the service.

The SPEARS accredited optometrists providing the service have seen the benefit to their patients and eye care services as a whole as demonstrated in the comments noted from one of the accredited practitioners.

"SPEARS has been a positive development in the provision and delivery of Primary Eyecare in this pilot area resulting in an EQUITABLE service with good access. The scheme has been embraced by Pharmacists and GP's alike and this has been important in gaining the confidence of the public.

Patients have expressed delight at being seen by an accredited practitioner, LOCALLY and free of charge. We find ourselves acting like a screening or triage service- filtering out and dealing with the minor complaints and referring on the more serious, complex and urgent conditions."

Feedback from a SPEARS Optometrist

"Most of us (optometrists) see this as an extension of what we have being doing for years, but with the aforementioned equitability for patients and recognition of our abilities - enhanced by accreditation- pushing Optometry forward.

I very much hope this valuable contribution will be allowed to continue and indeed will be further rolled out across the province as a whole".

The SPEARS pilot has enabled over 80% of patients with sudden onset eye problems to be managed safely in primary care optometric practice thereby releasing much needed secondary care capacity and finance.

In summary this service will ensure that patients with an acute, sudden onset, eye problem are seen at the right time, in the right place, by the right person.

Recommendations

1. SPEARS should be commissioned and rolled out as a permanent eyecare service across the Southern LCG area and the other four LCGs in Northern Ireland

2. The service should be promoted more widely to encourage patients to attend their optometric practice as their first choice for eye care intervention through:

a) Promotion to patients through the Choose Well campaign

b) Promotion to GPs, GP Federations and community pharmacists through educational events and practice based learning

3. Further clinical support and training should be provided to the SPEARS accredited optometrists including a peer discussion group, involvement in Project ECHO and attendance at Eye Casualty sessions.

4. Development of the use of IP registered optometrists or a patient group directive would streamline access to treatment and further relieve pressure on GPs.

5. Development of the service to include the management of patients with chronic dry eye conditions in primary care would further relieve secondary care ophthalmology pressures.

For further information relating to the pilot and its evaluation please contact:

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Health & Social Care Board
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Email fiona.north@hscni.net

8. References

1. New to follow up ratios in ophthalmology outpatient services. Royal College of Ophthalmologists, March 2011

2. Developing Eyecare Partnerships: Improving the commissioning and provision of eye care services in NI. DHSSPS, October 2011

3. Modernisation of the Regional Acute Eye Service Belfast Health and Social Care Trust, 2010

4. An audit of the ophthalmic division of an accident & emergency department of the Royal Victoria Eye & Ear Hospital Dublin Irish Medical Journal 94,256, Fenton S, Jackson E Fenton M (2001)

5. Transforming your Care: A review of Health and Social Care in NI. DHSSPS, 2011

6. Evaluation of the Primary Eyecare Acute Referral Scheme (PEARS) and the Welsh Eye Health Examination (WEHE) N Sheen et al. Cardiff University/Welsh Government, 2014

7. Auditing of Referral Refinements in Hull. Liz Greenwood Optometry Today, 25th October 2013

8. Auditing an Acute Eye Pathway – Stoke & North Staffordshire Mark McCracken Optometry Today, 22nd March 2013

9. An Audit of the Primary Eyecare Acute Referral Scheme within NHS Bromley CCG. Kriss Cottier Optometry in Practice, 2015 Vol 16 Issue 1

10. Northern Ireland Statistics and Research Agency (NISRA) Census 2011

11. Code of Ethics and Clinical Guidelines – now known as Guidance for Professional Practice. The College of Optometrists, 2014

12. Clinical Management Guidelines. The College of Optometrists, 2015

13. Report of the Northern Ireland Sight Test and Ophthalmic Public Health Survey 2014, DHSSPS, November 2014

14. Primary Care Ophthalmology Care. Stella Hornby Royal College of Ophthalmologists 2013

15. A randomised controlled trial of management strategies for acute infective conjunctivitis in general practice. Everitt HA, Little PS, Smith PNF BMJ 2006; 333:321

16. An evaluation of optometrists' ability to correctly identify and manage patients with ocular disease in the accident and emergency department of an eye hospital Hau S, Ehrlich D, Binstead K, Verma S.Br J. Ophthalmol 2007,91 437-442

9. List of Tables

10. List of Figures

11. APPENDICES

Appendix 1: SPEARS Inclusion Criteria

SPEARS PATIENT ELIGIBILITY and INCLUSION / EXCLUSION CRITERIA

Patient Eligibility - INCLUSIONS:

1) Patients must be registered with a General Medical Practitioner (GP) in Northern Ireland and therefore have a current Health and Care Number (HCN).

AND

2) Patients presenting with sudden onset of eye related problems that are NOT due for a routine GOS Sight Test or private eye examination.

Patient Eligibility - EXCLUSIONS:

The following patients are NOT eligible for a SPEARS Assessment:

1) Ophthalmic conditions requiring immediate, urgent referral to HES. For example: acute trauma, penetrating eye injury, chemical burn, orbital cellulitis. Patients with these ophthalmic conditions should be referred immediately without optometric SPEARS investigation.

2) Headaches - Patients presenting with these symptoms may be entitled to a GOS sight test, if eligible. Please note eligibility includes application of the recommended Department of Health intervals for GOS Sight Tests. If the patient is not eligible for GOS the optometrist should either provide private sight test or advise the patient to attend GP.

3) Problems related to glasses.

4) Patients with long term/chronic ophthalmic conditions. For example; diabetic retinopathy, long standing diplopia, long standing/previously investigated dry eye or blepharitis.

5) Pre - school age children.

Please note that patients may self-refer into the service or be referred by their GP, practice nurse, surgery reception

Appendix 2: Patient information – List of participating optometry practices

INFORMATION FOR PATIENTS

Do you have a sudden eye problem?
e.g. a red eye or painful eye

You may now have an appointment within 48 hours to have this assessed, and where appropriate, treated, at no cost through the NHS, with the following accredited Optometrists (Opticians) in the Armagh/ Dungannon area:

Practice	Address		Tel no.

To arrange an appointment contact one of the above practices of your choice, although if the optometry practice (opticians) that you usually attend is on the list you are encouraged to go there. ***You must be registered with a GP in NI and remember to bring along your Health & Care number which should be on your medical card.***

Appendix 3: Poster for GP and Community Pharmacies

Appendix 4: SPEARS Pilot – Assessment Outcome & Claim Form

ASSESSMENT OUTCOME AND CLAIM FORM	
Patient Details	**Optometric Practice Details**
Name :	SPEARS Accredited Optometrist:
DOB:	Personal Code:
Health and Care Number:	Practice:
Date of Last Eye Examination: GOS □ Private □	**GP Details**
Address:	GP Name:
Tel No:	GP Practice:

Referral Info	Referral Date:	SPEARS assessment date:
Referral Source (please tick)	GP ☐ Pharmacy ☐	Self-Referral ☐ Other ☐
SPEARS Activity (please tick)	First Appointment ☐	Follow up Appointment ☐
Presenting Symptom	Red eye □ Painful eye □ Visual change □ Flashes/Floaters □ Other (please specify)	
Diagnosis (please provide relevant details)	Conjunctivitis ☐ Sub-conjunctival haemorrhage ☐ Dry Eye ☐ Blepharitis ☐ Chalazion/Hordeolum ☐ Episcleritis ☐ Flashes/Floaters ☐ Corneal Foreign Body ☐ Simple Entropion / Ectropion ☐ Trichiasis ☐ Corneal Abrasion ☐ Other (Please specify) _____	
Outcome of SPEARS Assessment (please select all that apply) *Please state hospital name (please state advice given to patient)	Discharge ☐ Advice ☐ Treatment ☐ Refer to GP ☐ Refer to Secondary Care**:** Urgent & Direct to Hospital ***** _____ Via GP ☐ Foreign Body Removal ☐ Epilation ☐ Lid Hygiene ☐ Lubrication* ☐ Ophthalmic Medication ☐***** Was Prescription Request issued to GP ☐ ***If yes please state preparation/drug (s):** _____ *Advice to Patient (including use of any medication if prescribed) Follow up required (if first appt) ☐	
Patient Declaration and Signature	I confirm I have had a SPEARS Assessment. I consent to the results of this test being collected for the purpose of audit and ensuring best practice amongst optometrists. Signed: Date:	
Optometrist Declaration and Signature	The reason for the SPEARS assessment has been explained to the patient (of guardian) who agrees to it. Consent has been obtained for the exchange of information between the optometrist, GP and secondary care staff. I declare that I have provided the service of optometric SPEARS assessment in line with the Southern LCG SPEARS LES. Signed: Personal Code: Date:	

Appendix 5: Patient Experience Questionnaire

SOUTHERN PRIMARY EYECARE ASSESSMENT & REFERRAL SERVICE (SPEARS) EVALUATION

PATIENT INFORMATION SHEET

Thank you for visiting your optometrist (optician) for your eye examination.
You have been seen by your optometrist today as part of a new service that is being provided in the Armagh/Dungannon area and you are invited to take part in an evaluation of the service.

Why have I been chosen?

In September the Health and Social Care Board commenced a trial (pilot) service called the Southern Primary Care Eye Assessment and Referral Service, also known as **SPEARS**. This service is being provided in 12 optometry (opticians) practices in the Armagh/Dungannon area.
If someone develops a sudden (acute) eye problem the new service means they may have their problem assessed within 48 hours at an optometry (opticians) practice in their local area, as you have had. The optometrist will provide the assessment and then either manage your eye condition or arrange referral to the GP or the hospital as appropriate.

As you are one of the patients who have used this new service we would like your feedback to help us to assess how well the service is working and whether we should continue it.

Do I have to take part?

Participation in this evaluation is voluntary. All the information collected will be held securely and in confidence. Any information that identifies you personally will be removed so that you remain anonymous.

What will I have to do?

A short questionnaire is attached to this information sheet for you to take home to complete.
A stamped and addressed envelope has also been given to you to post the questionnaire back to the Health Board.
A member of the Health Board optometry team may contact you 2- 3 weeks later by telephone for a short follow up. There is a section on the questionnaire for you to indicate if you are willing to have this follow up telephone call.

What will happen to the results of the evaluation?

The findings will be used to help us find out how well the new service is working. It will also help us to improve the care of patients with sudden onset eye problems across Northern Ireland. The results may be published in a recognised optometric journal.
You will not, in any way, be identified in any published reports.
Please note that if you do not wish to take part it will not affect your current or future health care.

Health and Social Care Board

SOUTHERN **P**RIMARY **E**YECARE **A**SSESSMENT AND **R**EFERRAL **S**ERVICE -

SPEARS

Patient Experience Questionnaire

Thank you for completing this questionnaire

Please tick the box of your choice for each question and add information where it is asked for. Add any comments that you may have in the space provided at the end of the questionnaire.

Please return the questionnaire by post in the attached pre-stamped addressed envelope.

QUESTION 1

Why did you visit your optometrist today?

Red eye □ Sore eye □ Blurred vision □

Other reason – please give details

_____

QUESTION 2

a) How far did you have to travel to your optometrist for this eye assessment?

Less than 5 miles □ between 5-10 miles □

Between 10-15 □ Greater than 15 miles □

b) Was the practice:

Extremely convenient □ Very convenient □

Convenient □ Not convenient □

QUESTION 3

Who referred (sent) you to the optometrist?

Yourself □ Your GP □ your community pharmacist □

Other person - please give details - _____

QUESTION 4 When your eye condition developed and you contacted the optometry practice for an appointment, how soon were you offered the appointment?

The same day □ the next day □ within a week □

QUESTION 5

Was this your regular Optometrist (Opticians) practice?

Yes □ No □ Do not have a regular Optometrist □

QUESTION 6

a) Did the Optometrist find out what your eye problem was?

Yes □ No □ Unsure □

b) Did they advise you of the name of the condition?

Yes □ No □ Unsure □

QUESTION 7

Did you feel that there was good communication between you and your optometrist?

Yes □ No □

If no, please give details:

_____

For this question, tick all that apply

QUESTION 8

Following the SPEARS eye examination did the Optometrist:

a) Give you advice only? □

b) Give you advice & treatment? □

c) Advise you to obtain eye medication from your pharmacist? □

d) Refer you to your GP? □

e) Refer you to the hospital eye clinic? □

- If referred to hospital , please state which clinic e.g. Eye Casualty and which hospital

QUESTION 9

Since visiting your SPEARS Optometrist, has your eye problem:

a) Improved □

b) Not changed □

c) Got worse □

If your eye condition has not changed or has got worse have you:

a) Gone back to your optometrist □

b) Attended your GP □

c) Attended a hospital □

If attended hospital please state which clinic e.g. Eye Casualty and give the name of the hospital.

_____

QUESTION 10

How satisfied were you with the service that you received at your optometrists (opticians) practice?

Extremely Satisfied □ Very Satisfied □ Satisfied □ Not Satisfied □

QUESTION 11

Would you use this service again if you had a sudden eye problem?

Yes □ No □ Unsure □

Please feel free to add a comment

_____

_____

QUESTION 12

If there had been no local SPEARS service available at your optometry (opticians) practice, would you have?

a) Attended an Optometrist anyway? □

b) Attended another health service provider? □

Please tick which one you would have attended:

GP □ Pharmacist □ Minor Injuries Unit □

Hospital □ (please state which hospital)

_____

Please add any other comments you may have about this new SPEARS service:

_____

_____

Would you be willing to be contacted by telephone for a short follow-up by a member of the optometry staff in the Health Board?

Yes □ **No** □

If yes, please give your name and contact telephone number

Name: _____

Tel number: _____

Please indicate when it would be most convenient to contact you

Morning □ **Afternoon** □ **Evening** □

Thank you very much for taking the time to complete and return this questionnaire.

Please return by post in the pre-stamped addressed envelope enclosed.