

The BARS

BRITISH
ASSOCIATION
OF
RETINAL
SCREENING

Chronicle



JADE JONES FROM CENTRAL MERSEY DESP - ARTISTIC

*Photography
Competition
Winners*



SUSAN WHALLEY FROM THE CENTRAL MERSEY DESP - CLINICAL

FEATURING

**BARS 2024
CONFERENCE OVERVIEW**

PAGES 2-4

TOGETHER TYPE 1

PAGES 5-6

**COMPETITION
WINNERS**

PAGES 9-13

CONFERENCE OVERVIEW 2024

By Charlotte Wallis, BARS Co-chair



Welcome to our 10th BARS Chronicle, conference edition. We hope you enjoy reading it and if you have an article or suggestion for future editions, please contact chair@eyescreening.org

On September 26th and 27th we held our annual conference in Liverpool. It was wonderful to see so many of you there. We had fantastic sessions on artificial intelligence, medical photography, health inequalities, diabetes remission, the hybrid closed loop system and research to name a few. The presentations are available on our website, click below to be directed to their location on our website.

CLICK HERE

We would like to thank all our speakers and sponsors for their contributions to the BARS conference 2024.



Photography by Kamran Rajaby

We have an article in this edition from Josh Cook who is a youth worker for Together Type 1 who spoke on Friday. He shared feedback he received from the young people with diabetes he works with. These young people wanted us to hear their views on diabetic eye screening, and we thank them for their participation.

It was, however, the end of an era for BARS for several reasons. Our two longest serving council members Alison Simpson and Jane Cansfield are retiring and it was their last conference. Alison has been the BARS administrator for 20 years and Jane has been the trade/conference organisers. At the gala dinner videos from presidents past and present and chairs of BARS were shown sharing thanks and experiences. It was a very emotional evening and a fitting tribute to all Alison and Jane have contributed to BARS. A huge thank you ladies, BARS will not be the same without you.

On a personal level it was sad to say goodbye to Richard Bell, my co-chair for the past 4 years. He has a huge passion for eye screening and ophthalmic imaging, he has been a pleasure to work with, who BARS and I will miss greatly.



Photography by Kamran Rajaby

**Goodbye
&
Good Luck**



It was also our last 2-day conference, BARS are developing new ideas as we understand that getting funding for a 2-day event is challenging in the times we live in. We want to make our events more accessible to our members. We are busy planning and will be bringing you exciting news soon

We welcomed our new co-chair Denise Mcloughlin, surveillance manager/grading lead at the South East London Diabetic Eye Screening Programme at the AGM. Denise brings a wealth of experience with ideas on reshaping the BARS platform with a centralised hub for sharing ideas, learning and success stories. We look forward to bringing news on this in future editions of the Chronicle.

Enjoy the Chronicle!



Photography by Kamran Rajaby



TOGETHER TYPE 1 AT BARS 2024

By Josh Cook

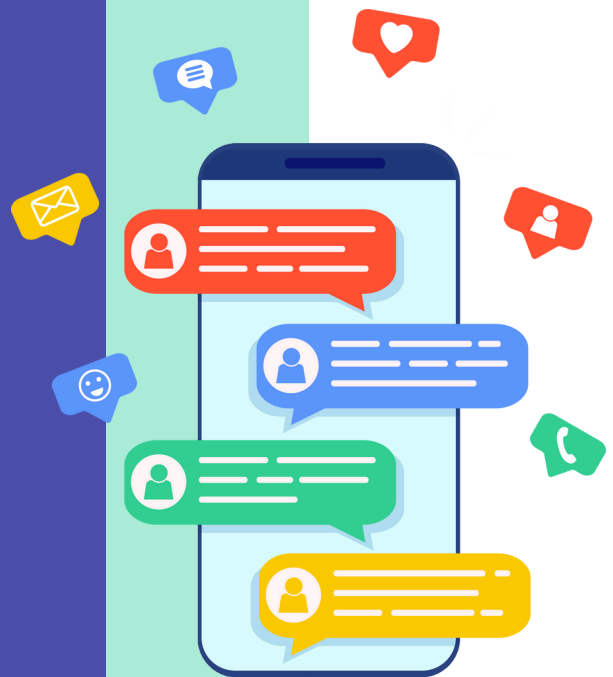
My name is Josh, and I serve as the North of England Youth Worker at Diabetes UK. A few weeks ago, I had the pleasure of speaking to many of you at the BARS Conference in Liverpool. To refresh your memory, let me explain why I was there.

I've been living with type 1 diabetes for more than 20 years and always wished for a support group during my childhood. Now, that wish has become a reality with Together Type 1. This national programme, funded by the Steve Morgan Foundation, supports young people aged 11-25 across the United Kingdom. Together Type 1 aims to give a voice to those who feel unheard. Through online chats, fully funded outings, and opportunities to engage with NHS policy teams, we've had two fantastic years and eagerly participate in events like the BARS Conference.

One of the most important things I've taken away from my experiences with inspiring young people is that seeking honest feedback and asking for more opportunities is essential for growth.



Photography by Kamran Rajaby



Open communication is key to improving any situation. The conference speech was crafted by asking young people, "What experiences have you had with your eye care?" Each response, as honest as the last, provided diverse perspectives from across the UK. These accounts highlighted genuine feelings many have experienced when receiving a letter or attending an appointment. You can find these comments on the BARS website, showcasing a wide range of views, such as:

"The waiting room at those appointments is always the same. I'm always the youngest there by at least 50 years. They all turn around and look at me, wondering what I'm doing there."

"The new location for screening was actually in my GP. This made the experience not only easier to access but less intimidating attending at a practice."

"One time, the optician showed me another diabetic patient's eye screening with many complications, using it as a warning to take care of myself."

The above comments are echoes of many more views within the diabetes community. The chance to voice these moments was greatly appreciated by those who shared their stories as, for many, it was the first time they felt heard. Opportunities like this at the BARS conference are ones we at Together Type 1 would grasp with both hands.

If you are interested in hearing more about Together Type 1 and our work, please click to the right, or email the team at type1youth@diabetes.org.uk.

Thank you.



Competition Winners & Runners Up Photography Artistic

The winners received £100 Amazon vouchers for each category and the runners-up received £50 Amazon vouchers for each category and they all received a certificate.



1



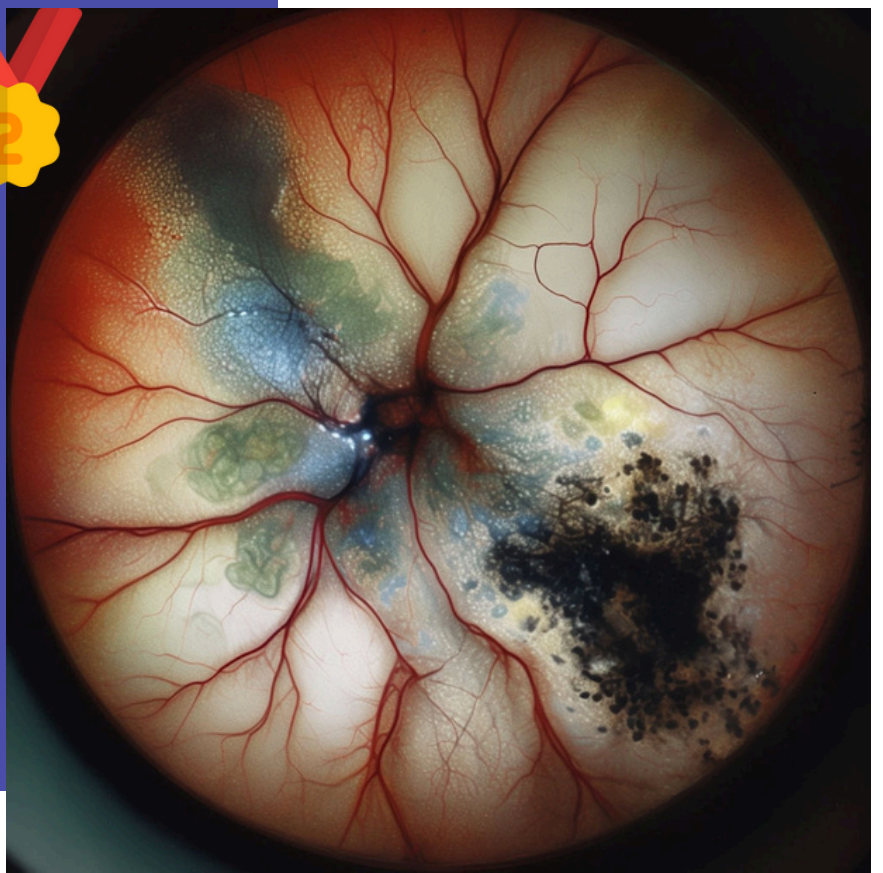
WINNER
Artistic
Jade Jones
Central
Mersey DESP

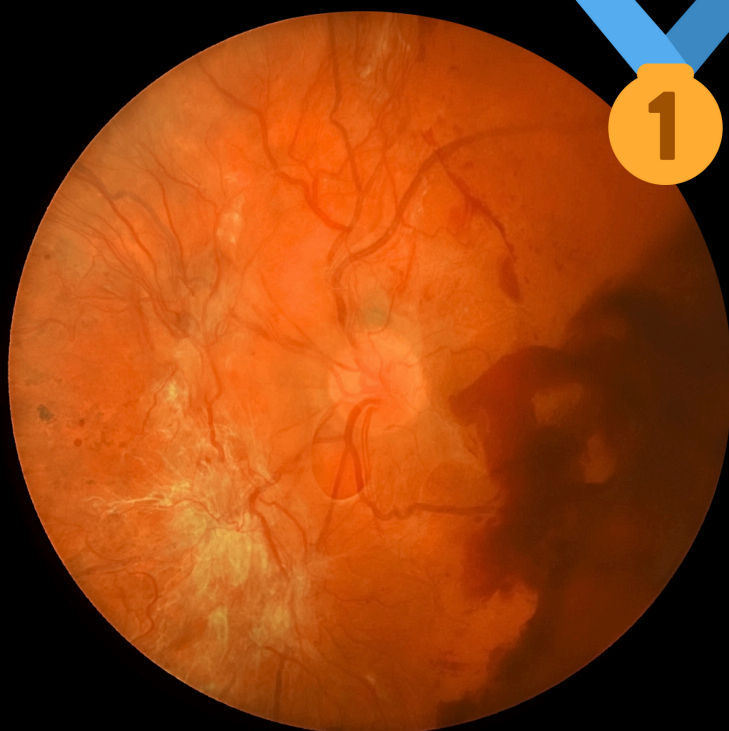


mainline
INSTRUMENTS
Sponsored kindly by
Mainline Instruments

RUNNER-UP
Artistic
Diliana Nikolova
South West London DESP

2





WINNER

Clinical
Susan Whalley
Central Mersey DESP

Case study

Date of screening: 10/23

DR Grade: R3A M1 LE

Male aged 60
Type 2 Diabetic

Visual Acuity:
RE - NPL
LE - PL

Previously under HES - injections and laser

First screening since 2021

Patient attended for screening complaining of blurred vision in LE.
Patient was at the gym 3 days prior and had lifted heavy weights, had blurred vision in LE since.

Patient was advised to attend to A&E Eye Hospital on day of screening.



RUNNER-UP

Clinical
Sarah Lake
Jersey DESP

Hemiretinal Vein Occlusion



Case study

Pathology:

This image shows a right hemiretinal vein occlusion characterised by flame-shaped, blot and dot haemorrhages, cotton wool spots and retinal oedema. What makes this more interesting is the appearance of vascular sheathing associated with an older pre-existing branch retinal vein occlusion (BRVO). New vessels can also be seen at the disc.

A hemiretinal vein occlusion is considered to be a milder form of a central retinal vein occlusion (CRVO). Here the main retinal vein posterior to the optic nerve lamina cribrosa is occluded, normally by thrombosis. As the central retinal artery shares a common sheath with the central retinal vein atherosclerosis of the artery can cause compression of the vein, another common cause of this type of vein occlusion.

A CRVO can be subdivided into two categories: non-ischaemic or ischaemic. A non-ischaemic CRVO is the most common, the patient often presenting with a milder degree of visual difficulty and a better prognosis. Ischaemic CRVO has a much lower visual prognosis due to macular ischaemia. Vascular growth factor and inflammatory mediators are released in response to hypoxia in the retinal tissue and this can lead to macular oedema, vitreous haemorrhage and new vessels of the retina or iris. The poor vision and retinal features seen in this patient point to an ischaemic presentation.

Outcome:

This patient was referred to ophthalmology for the hemiretinal vein occlusion. Here OCT of the right macular showed significant macular oedema. Clinical examination showed a quiet anterior segment with no iris neovascularisation. Posterior segment examination confirmed the presence of new vessels at the disc. The patient was offered intravitreal treatment, but she was not keen on this. She was listed for right eye laser photocoagulation to treat the new vessels and reduce the risk of further new retinal vessels or the development of new vessels in the anterior segment.

Differential diagnosis:

Ocular ischaemic syndrome: This is a rare disorder of visual function attributable to non-perfusion secondary to occlusion of the internal carotid artery. Posterior segment manifestations include narrowing of the retinal arteries; deep retinal haemorrhages; macular oedema and neovascularisation of the optic disc or retina.

Hypertensive retinopathy: An acute increase in systemic blood pressure or chronic elevated hypertension can affect the posterior segment causing a hypertensive retinopathy. Retinal features include retinal haemorrhages, especially flame shaped haemorrhage involving the superficial retina; exudates and cotton wool spots. A less common feature of hypertensive retinopathy is a macular star of Henle due to deposition of hard exudates around the macula. This more commonly seen in patients with malignant hypertension.

Competition Winners & Runners Up POSTERS



Photography by Kamran Rajaby

Ian Brennan, Stephen Kelly, Joanne Harmon, Matthew Phillips, Andrew Combes, Shane McMahon, Rob Acheson, David Keegan, Helen Kavanagh, Louise O'Toole, **'EVALUATING THE OCT PATHWAY IN THE IRISH DIABETIC EYE SCREENING PROGRAMME'** NEC Care - Ireland

The winning posters of the 2024 BARS/Topcon (GB) Medical Ltd Poster Competition were announced at this year's conference in Liverpool with the winners each receiving Amazon vouchers. The standard and content exceeded expectations and with a total of 26 entries, it was difficult to pick out the individual winners.

EVALUATING THE OCT PATHWAY IN THE IRISH DIABETIC EYE SCREENING PROGRAMME

NEC Care

AUTHORS
 Ian Brennan, Stephen Kelly, Joanne Harmon, Matthew Phillips, Andrew Combes, Shane McMahon, Rob Acheson, David Keegan, Helen Kavanagh, Louise O'Toole
 * NEC Care, Dublin, Ireland

INTRODUCTION
 The Irish Digital Diabetic Eye Screening Programme introduced the digital surveillance (DS) pathway in 2020 to reduce the strain on hospital eye services and improve patient satisfaction by minimising hospital visits. It involved screening using optical coherence tomography (OCT), treatment which has been diagnosed with background retinopathy (R0/R1) and stable proliferative retinopathy (P3), by providing the service within the patient's community. It allows the burden on the country's treatment services and minimises travel for the patients. The aim of this paper is to show that using OCT to monitor these patients with stable low risk retinopathy is safe, effective and sustainable.

METHODOLOGY
 All patients from 2020 to 2024 were taken from the OCT Digital surveillance unit for the program. Inclusion criteria included patients with initial screening/upgrade from treatment centre with R0/R1 grading with visual acuity (VA) of 6/9 or better (initial screening) and background retinopathy. And patients with R2/R3 who have been seen 1 year without treatment and have been discharged from this treatment clinic.

The patients were broken down into three categories:
 A. R0/R1 with VA < 6/9 from initial screening
 B. R0/R1 with VA < 6/9 from treatment clinic
 C. R0/R1 initially referred, then discharged to DS

The following patients were excluded from this study. Patients with clinically significant macular oedema (CSMO). Those with retinopathy grade of R2 or R3 and patients who had subsequently treatment within the last 12 months. Data included in this study included the initial screening results, the patients VA measurements and subsequent clinical pathway for R0/R1 patients screened using OCT to have treatment analysis was conducted using excel and R.

RESULTS
 The study included 1,444 patients with DS0/1 screening with an average of 2.3 screens per patient. The average age of the patient group for DS0 screening was 62.4 years and 0.8% were male. 95.4% of these patients were Type 2 diabetes and had diabetes for an average 16.3 years (see table 1).

Individuals	1444
Number of visits	3629
Visits per patient	2.5
Age (mean (SD))	62.4 years (15.3)
Gender (number (%))	
Female (%)	5282 36.6%
Male (%)	9564 63.4%
Diabetes Type (number (%))	
Type 1	3329 23.0%
Type 2	11077 76.4%
Not specified	53 0.4%
MODY	15 0.1%
Other	14 0.1%
Duration (median (IQR))	16.3 years (10.5 - 24.8)

Table 1: Demographic data

Examining the retention of the patients from their DS appointments we found that the most majority (71.4%) were kept in the DS pathway, and another 14.2% (discharge) of an appointment to return to annual screening. The DS pathway optimises resource allocation thereby reducing the need for hospital follow up. It also results in a low percentage of repeat referrals (see 2.3%).

The retention of this study includes the final follow up details for most patients. Retrospective analysis was limited by the scope of this study, but your research suggests cost effectiveness.

Patients research based on this study include a long term follow up analysis of the patients, economic analysis, an assessment of the technology and infrastructure capabilities and the stability and efficiency of annual screening and data management systems.

Progression to worst retinopathy grade	Number (n=581 visits)	%
Remained R0 / R1 / R2	9564	98.7
R2	64	0.7
R3A	31	0.3
NDED/Ungradable	28	0.3
Total	9687	

Table 1: Progression to worst retinopathy grade at previous visit

CLINICAL OUTCOME OF DS VISIT

Outcomes	Number (all visits)	%
Keep in Digital Surveillance	27868	71.4
Discharge to Annual Recall	5322	14.2
Refer to Six Lamp	77	0.2
Refer to ophthalmology for DR	2239	6.2
Refer to ophthalmology for non DR	134	0.4
Refer to ophthalmology urgent for non DR	184	0.5
Refer to ophthalmology urgent for DR	424	1.1
Refer to DRS Pregnancy Pathway	6	0.0
Total	38828	

Table 2: Clinical outcomes of DS visit

DISCUSSION
 The DS pathway is safe and effective for R0/R1 and R2/R3 diabetic retinopathy management. The majority (98.7%) of patient remain stable or improve. The majority (98.6%) remain in surveillance or return to annual screening. The DS pathway optimises resource allocation thereby reducing the need for hospital follow up. It also results in a low percentage of repeat referrals (see 2.3%).

The retention of this study includes the final follow up details for most patients. Retrospective analysis was limited by the scope of this study, but your research suggests cost effectiveness.

Patients research based on this study include a long term follow up analysis of the patients, economic analysis, an assessment of the technology and infrastructure capabilities and the stability and efficiency of annual screening and data management systems.

1st place

Ian Brennan, Stephen Kelly, Joanne Harmon, Matthew Phillips, Andrew Combes, Shane McMahon, Rob Acheson, David Keegan, Helen Kavanagh, Louise O'Toole **'EVALUATING THE OCT PATHWAY IN THE IRISH DIABETIC EYE SCREENING PROGRAMME'**

2nd place

Benedict Symon, Carrie Hinton, Gillian Slingerland, Amy Austin, Sallyann Matthews, Carmel Japel, Roger Brint **'THE POSITIVE IMPACT OF THE HOSPITAL EYE SERVICE RECALL INITIATIVE ON PATIENT CARE'**

3rd place

Marc Lewis, Anthony Bostock **R3A REFERRAL COHORT ANALYSIS IN OUR MOST DEPRIVED AREA: SWINDON**





THE POSITIVE IMPACT OF THE HOSPITAL EYE SERVICE (HES) RECALL INITIATIVE ON PATIENT CARE

NEC
NEC Care

AUTHORS

Benedict Symon - Fallsafe Officer, Carrie Hinton - Senior Fallsafe Officer, Gillian Slingerland - Fallsafe Officer, Amy Austin - Fallsafe Team Leader, Sallyann Matthews - Fallsafe Officer, Carmel Japel - Fallsafe Officer, Roger Brint - Dorset Programme Manager

INTRODUCTION

This poster explores the collaboration of the Dorset Diabetic Eye Screening Programme (DDESP) and United Hospitals Dorset (UHD) to reduce waiting times in the hospital eye service (HES). The HES recall process is crucial in maintaining efficient operations and ensuring high standards of patient care.

Identifying Issues

Regular communications between DDESP and HES highlighted that waiting lists were extensive, the reasons were:

- Recovery struggles following Covid-19 delays.
- Staffing issues at HES leading to a shortage of clinic availability.
- Cautious retention of low-risk patients.

Proposed solution

- HES completed a validation of their waiting lists
- Low-risk, delayed patients were recalled to DDESP

METHODOLOGY

1. HES validation:

HES validated their lists before sharing with DDESP.

2. DDESP Validation/ Initial Contact:

Following DDESP validation, patients were contacted by phone on two separate occasions to schedule their appointments and explain the collaboration between sites. If patients did not attend (DNA) or cancelled their appointments, an additional attempt was made to reach them.

3. Closed Appointment Issuance:

If direct contact could not be established after multiple attempts, a closed appointment was issued and sent to the patient.

4. Attendance Tracking:

- Attendance was tracked using a dedicated system and recorded:
- Whether the patient remained in the DDESP:
- The specific pathway for the patient, Routine Digital Screening (RDS), Digital Surveillance (DS), or SMI Lamp Biomicroscopy (SLB).

If the patient was referred back to the HES a dedicated coordinator corresponded with UHD to provide details of patients being re-referred, ensuring they were urgently seen in the HES clinic.



From December 2023 to July 2024 the initiative saved:
 • 194 HES slots • 97 hours HES clinic time • 3 weeks of clinic time
 73% Patients retained in DDESP

Key outcomes:

- **Increased Retention in DDESP:** 73% retention within DDESP by minimizing missed appointments and facilitating follow-up.
- **Efficient Pathway Management:** Assignment to specific pathways (RDS, DS, SLB) ensured that patients received appropriate and timely care.
- **Timely Referrals to HES:** Effective communication with UHD facilitated the urgent referral of patients back to HES when necessary, optimizing resource utilization and patient care.

DISCUSSION

- A significant number of patients have been successfully retained within the DDESP, facilitating the reallocation of appointment slots at the HES.
- This initiative has significantly expanded the capacity to accommodate more patients and urgent referrals, maximizing the overall effectiveness of HES.
- It has reassured HES and given ophthalmologists the confidence to avoid overly cautious patient retention, highlighting the strain it places on resources and the risk of scheduling unnecessary appointments.
- In addition, it has allowed for clearer communication between HES/DDESP and the strengthening of relationships.
- These findings underscore the impact of effective patient management within DDESP on hospital resource utilization, highlighting the potential for significant improvements in service delivery and patient care.

CONCLUSIONS

The audit process led to significant improvement in:

- Patient backlog reduction
- Resource utilisation
- Operational efficiency
- Capacity management
- Timely care

The expanded audit has dramatically transformed operational efficiency, patient management, and timely access to urgent care, directly advancing HES's strategic objectives. It lays a robust foundation for a sustainable, collaborative future in DH healthcare, ensuring excellence and resilience in service delivery.

Challenges included, improving patient attendance and operational efficiency, with key issues such as patients being unaware of their discharge status or remaining under HES for 'screening' treatment. To address this we implemented direct patient contact to clarify the process.

Building on the successful implementation at UHD, the audit process was extended to Epsom St Helier and Dorset County Hospital, where effective methods from the initial audit were adopted. Other hospitals have also shown interest in this approach.

Beverly, UHD Business Manager

Benedict Symon, Carrie Hinton, Gillian Slingerland, Amy Austin, Sallyann Matthews, Carmel Japel, Roger Brint 'THE POSITIVE IMPACT OF THE HOSPITAL EYE SERVICE RECALL INITIATIVE ON PATIENT CARE' Dorset DESP - NEC Care



Photography by Kamran Rajaby

Full versions of posters are available to view on the BARS website

Marc Lewis, Anthony Bostock R3A REFERRAL COHORT ANALYSIS IN OUR MOST DEPRIVED AREA: SWINDON BaNES, Swindon & Wiltshire DESP - NEC Care



Photography by Kamran Rajaby

BaNES, Swindon and Wiltshire Diabetic Eye Screening Programme

R3A REFERRAL COHORT ANALYSIS IN OUR MOST DEPRIVED AREA: SWINDON

Team Leader: R3A DDESP
 Team: Carrie Hinton, Gillian Slingerland, Amy Austin, Sallyann Matthews, Carmel Japel, Roger Brint

Health Equity audit of R3A referrals made to Great Western Hospital, Swindon. Analysing a cohort across a 4-year period 2020 to 2024. Understanding demographics to influence engagement and reduce referential retinopathy.

INTRODUCTION

The Swindon area was chosen because it has the most deprived areas in our programme. It also has the most ethnically diverse population and a higher prevalence of R3A.

PRODUCTION

The audit is a group of 188 persons with diabetes, 108 male and 72 female with a median age of 58 in the DDESP.

R3A PREVALENCE

NHS England 0.41%
 BSW DESP 0.37%
 Swindon Area 0.42%

SEX

Male 108
 Female 72

ETHNICITY

White British 86.54%
 White Irish 1.06%
 White Other 0.53%
 Black African 0.53%
 Black Caribbean 0.53%
 Black Other 0.53%
 Indian 0.53%
 Pakistani 0.53%
 Bangladeshi 0.53%
 Chinese 0.53%
 Other 0.53%

AGE RANGE

45-49 4.2%
 50-54 1.06%
 55-59 1.06%
 60-64 1.06%
 65-69 1.06%
 70-74 1.06%
 75-79 1.06%
 80-84 1.06%
 85-89 1.06%
 90-94 1.06%
 95-99 1.06%

INDEX OF MULTIPLE DEPRIVATION (IMD)

Index of Multiple Deprivation

Years	Count	%
0-4	16	15
5-9	34	19
10-14	29	16
15-19	63	46

METHODOLOGY & ANALYSIS

- We looked at all patients with diabetes given an R3A grade at screening across RDS, DS and SLB pathways over the last screening years.
- We looked at service user positions on a map and overlaid with the top 20% most deprived districts in Swindon.
- We assessed this against our screening to inform to ensure sufficient geographical service provision and transport links, we expected to see a higher prevalence of R3A in the most deprived groups; however, the data showed this to be only marginally increased with a more even spread across all IMD groups.
- We expected the data showed the prevalence of R3A increased with the known duration of diabetes. The highest prevalence of R3A was seen in the population aged 50-59 years and higher in males rather than females.
- Ethnicity data was the most revealing, 50% of the R3A cohort were Asian (Indian, Pakistani, Bangladeshi, other Mixed Asian) the Swindon 2021 census demographic data indicated that 23.87% of the general population identifies as Asian.
- As a percentage of total cohort, Swindon's R3A prevalence is in line with the national average, but slightly higher than BSW as a whole.

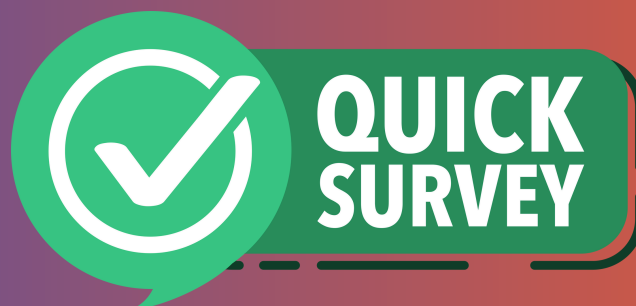
CONCLUSION

- Some of the data obtained as we had expected to see a relationship between the prevalence of R3A and the level of deprivation. However, our findings indicate that there would be limited benefit in concentrating on areas with greatest deprivation.
- However, the biggest opportunity would come from engaging more with our Asian communities, especially the Bangladeshi immediately adjacent to our central screening service.
- In addition, improving access for working age males would also reduce the risk of undetected R3A. We do not currently check but other measures could be considered.
- The mapping data also supports that there may be benefits to having an additional screening location in North Swindon, although this area is well connected by public transport links to our current locations.

BARS ARE INTERESTED IN HEARING FROM YOU!

As discussed at this year's AGM, BARS is reconsidering its conference format for the future, and we'd love your input.

Click the icon below to answer a very quick survey to let us know your views.



Thank you

TO OUR CONFERENCE SPONSORS...

