BaNES, Swindon and Wiltshire Diabetic Eye Screening Programme

R3A REFERRAL COHORT ANALYSIS IN OUR MOST DEPRIVED AREA: SWINDON

NEC Care

NHS Screening Programmes

Diabetic Eye

AUTHORS

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A 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 proliferative retinopathy.

INTRODUCTION

- Analysis is against a group of 180 persons with diabetes, 108 male and 72 female with a median age of 56 in BSW DESP.
- 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.
- We wanted to analyse the data more closely to build a better understanding of the cohort and identify any improvements or recommendations we could make to adapt our service to the needs of our service users. The ultimate aim is to provide a more targeted engagement response in an attempt to reduce the incidence of R3A in our population with diabetes.
- Analysis broke down the cohort into certain demographic categories to understand what some of the drivers for higher R3A results might be. As a caveat it must be noted that correlation is not causation, but it can indicate some potential focus areas.

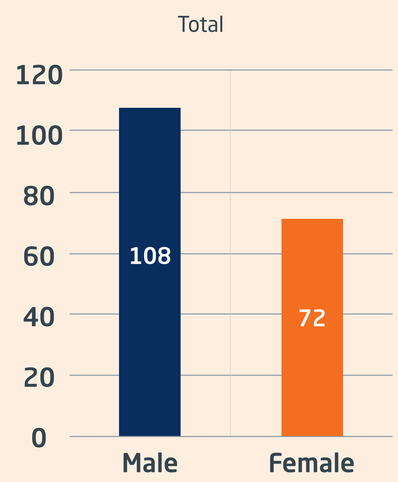
R3A PREVALENCE

NHS England
0.41%*

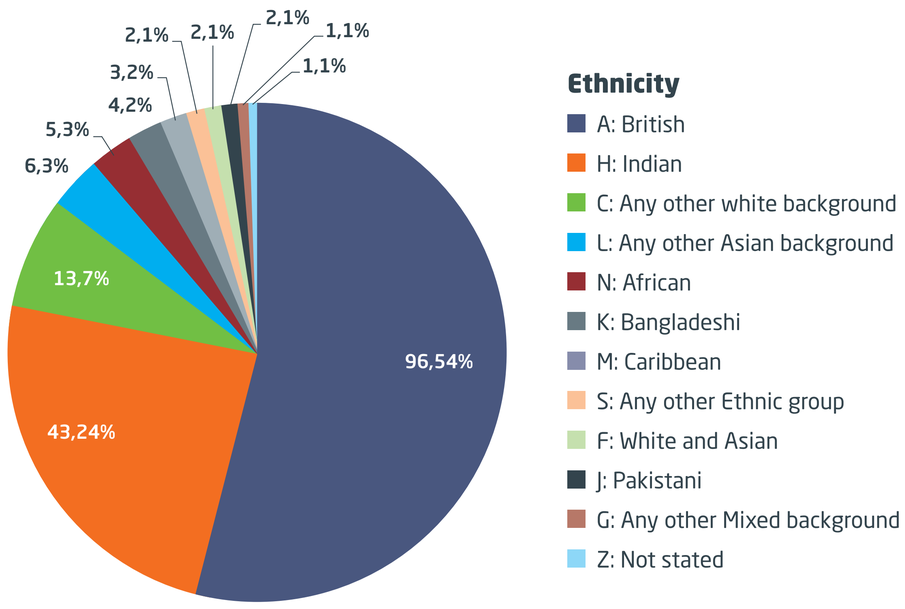
BSW DESP
0.37%

Swindon Area
0.42%

SEX

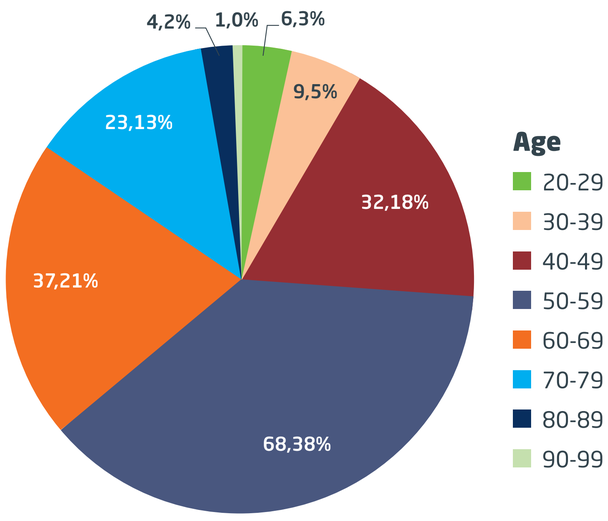


ETHNICITY

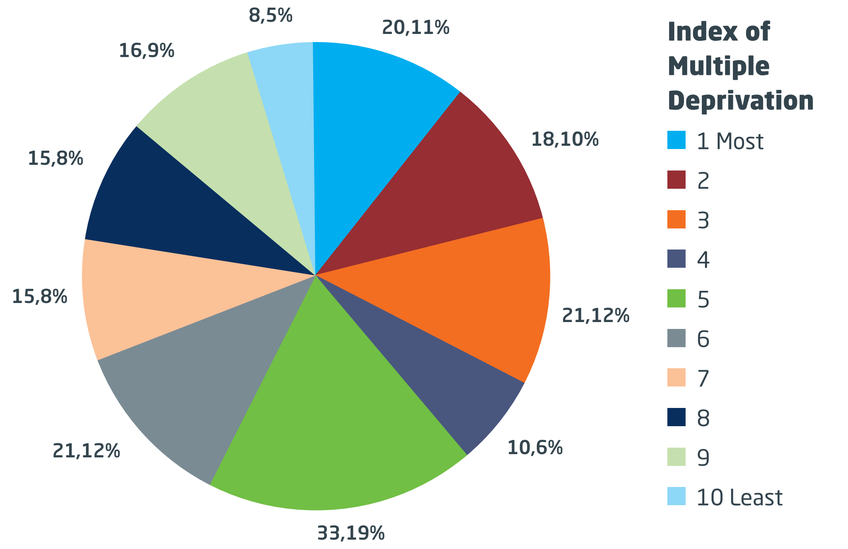


AGE RANGE

Age Range	Count	%
20 - 29	6	3.3
30 - 39	9	5.0
40 - 49	32	17.8
50 - 59	68	37.8
60 - 69	37	20.6
70 - 79	23	12.8
80 - 89	4	2.2
90 - 99	1	0.6



INDEX OF MULTIPLE DEPRIVATION (IMD)

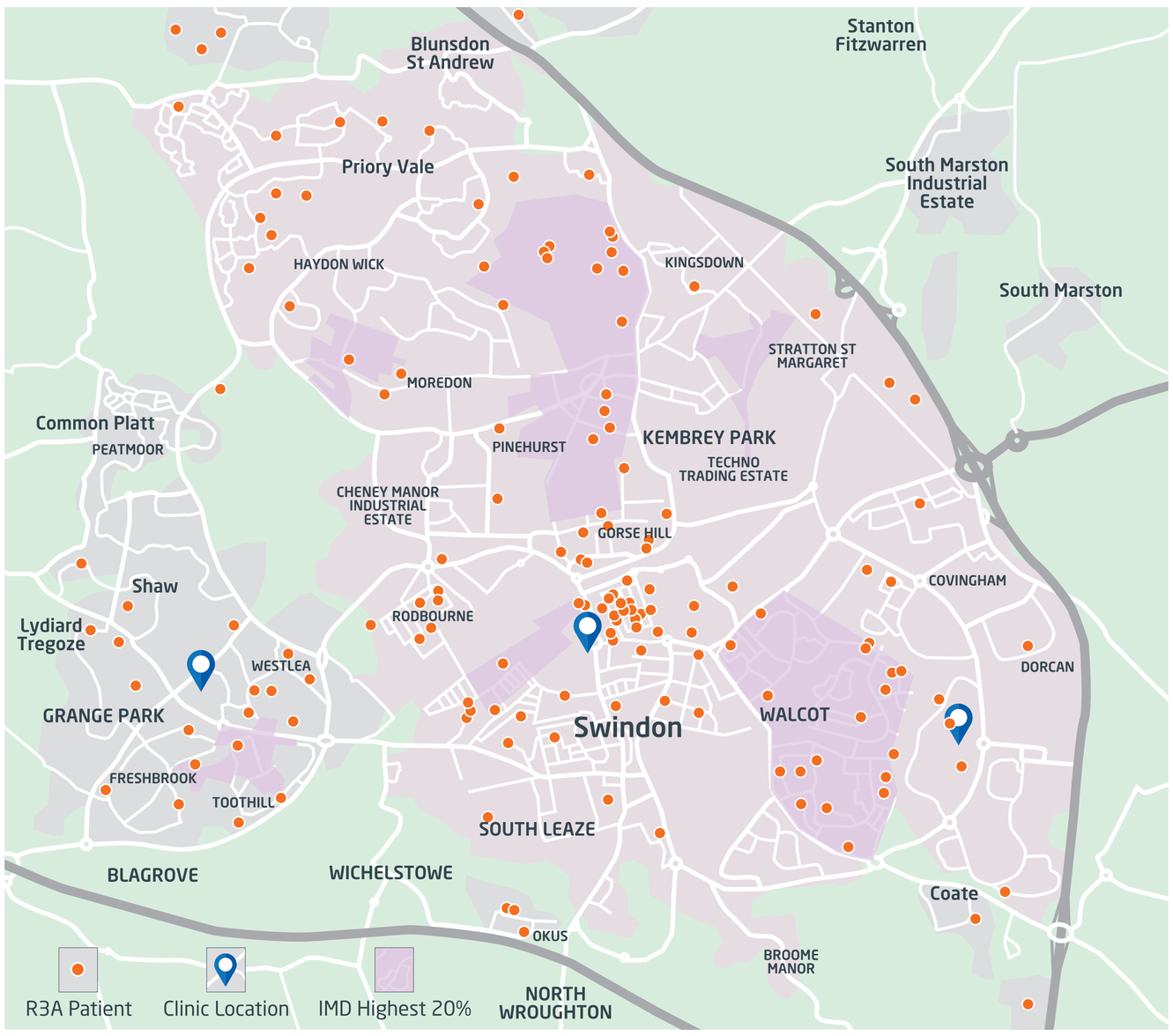


KNOWN DURATION OF DM

Years	Count	%
0 - 4	34	19
5 - 9	34	19
10 - 14	29	16
15 - 20	83	46

METHODOLOGY & ANALYSIS

- We looked at all persons with diabetes given an R3A grade at screening across RDS, DS and SLB pathways over the last screening years.
- We plotted service user postcodes on a map and overlaid with the top 20% most deprived domicile areas in Swindon.
- We assessed this against our screening locations 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.
- As 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, 30% of the R3A cohort were Asian (Indian, Pakistani, Bangladeshi, other Mixed Asian). The Swindon 2021 census demographic data indicated that 11.6%** 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 surprised us as we had expected to see a relationship between the prevalence of R3A and the level of deprivation. Therefore, 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 large cluster immediately adjacent to our central screening venue.
- In addition, improving access for working age males would also reduce the risk of undetected R3A. We do run Saturday clinics but other measures could be considered.
- The mapping data also suggests that there may be benefit to having an additional screening location in North Swindon, although this area is well connected by public transport links to our current locations.

References:
* https://www.gov.uk/government/publications/diabetic-eye-screening-2021-to-2022-data
**https://www.varbes.com/demographics/swindon-demographics