

NHMF Damp & Mould Webinar

6 November 2023



Call to Action

- Steering Group formed following publication of HO Spotlight Report (October '21)
- Group includes colleagues company wide and City Council links with Public Health
- Self-assessment against the 26 Recommendations – Action & Service Improvement Plans
- Group has now developed into a standing 'Healthy Homes Committee', developing links with Adult and Children's Services.
- Self-assessment ongoing against emerging legislation and guidance (e.g. Social Housing (Regulation) Act 2023, RSH, DLUHC)
- Internal Audits
- Regular reporting to Audit Committee, Board and Council's SEB
- Weekly activity reporting to Property DMT
- KPI dashboard

Key enhancements

- DMC Task Force undertook service request Audit – No contact in previous 12 months and service requests cancelled (declined/self-resolution or no access)
- External specialist training for all front-line colleagues, technical teams and repair triaging & scripting
- Revised Repairs/DMC Policy and Empty Homes & Mutual Exchange standard and checklist, following customer consultation (circa 600 responses)
- New priority coding to track DMC activity separately from other mainstream repairs
- Revised Complaints Procedures, with monitoring & learning to SMT
- Launch of 'See-it-Report-it' (SiRi) with colleagues and contractors
- Data Sharing Agreement with Fire Service (inc. DMC observed during Safe & Well visits)
- Targeted comms campaign to encourage reporting, advice to minimise effects of condensation, including tenants meetings, Facebook Live, emails, written guidance and website, etc. Leading to a fourfold increase in DMC related service requests
- Provided in excess of £400,000 financial support (rising energy costs, etc) to 3,800 customers (2022/23)
- DMC risk (RAG) protocols, and additional resources exceeding £1million, to target prompt intervention and remedial works

Customer Focus

- Customer Satisfaction and follow ups
- Healthy Homes Advisors, externally accredited training on advice, guidance, communication and empathic approaches
- Access to Homes Policy (aligned with compliance principles) and engages the City Council's Adult and Childrens Services and Legal team
- Fast Tracking of Disrepair Claim surveys where any reference to DMC
- Improved service standards and waiting times, more treatment at first visit
- Increased use of temporary accommodation for any Cat 1 issues or vulnerable occupants
- New Customer App, with improved repair status updates and prompts to update vulnerability and EDI data due for launch by end of 2023
- Companywide training needs and competency analysis completed
- Ongoing recruitment to undertake more works using in-house team (better VFM & CX)
- Increased use of thermographic cameras to support customer advice
- Accelerated roll out of IoT (in-home environmental sensors)
- Better use of data to inform repairs and capital investment (more on that later)

Customer Segmentation

- Segmentation is an important strategic tool to help us really understand our customers and support the design of our future services
- Each segment is a group of customers who are different to other customer segments with distinct and identifiable needs, attitudes, strengths and feelings.
- 1,100 customers responded. The survey contained over 50 statements and questions to gain insight into our customers' lives, experiences, personalities, strengths and challenges.
- 95% confidence level
- Evidence to suggest our customers needs are changing, but their individual needs and daily lives vary considerably

Customer Segmentation

Difficulties affecting the daily lives of our customers

More than two thirds of our customers have at least one condition that affects their day to day life, and 41% of customers have three or more conditions. This information highlights some of their main difficulties.



Physical conditions

Conditions affecting physical health including illness and diseases such as: *Arthritis, Fibromyalgia, Diabetes, Asthma, COPD, Heart disease*



Mental health conditions

Conditions affecting mental health and specific disorders such as: *Depression, Anxiety, OCD, PTSD, Eating disorders, Bipolar, Schizophrenia*



Cognitive conditions

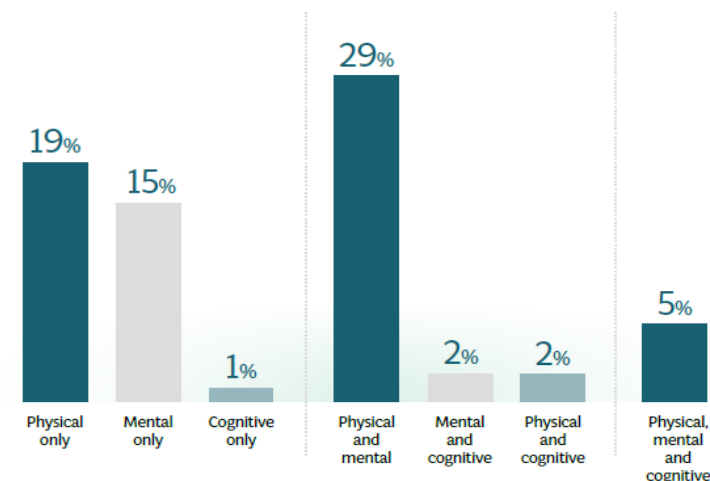
Conditions affecting capability (can have mental and physical components) such as: *Learning Disabilities, Dyslexia; Developmental disorders, Autism, Asperger's, ADHD; Neurodegenerative diseases, Alzheimer's, Dementia; Neurological disability, brain injury, Aphasia*

72% of customers have at least one condition that affects them on a daily basis

72% experience physical, mental or cognitive conditions



23% use some kind of mobility aid

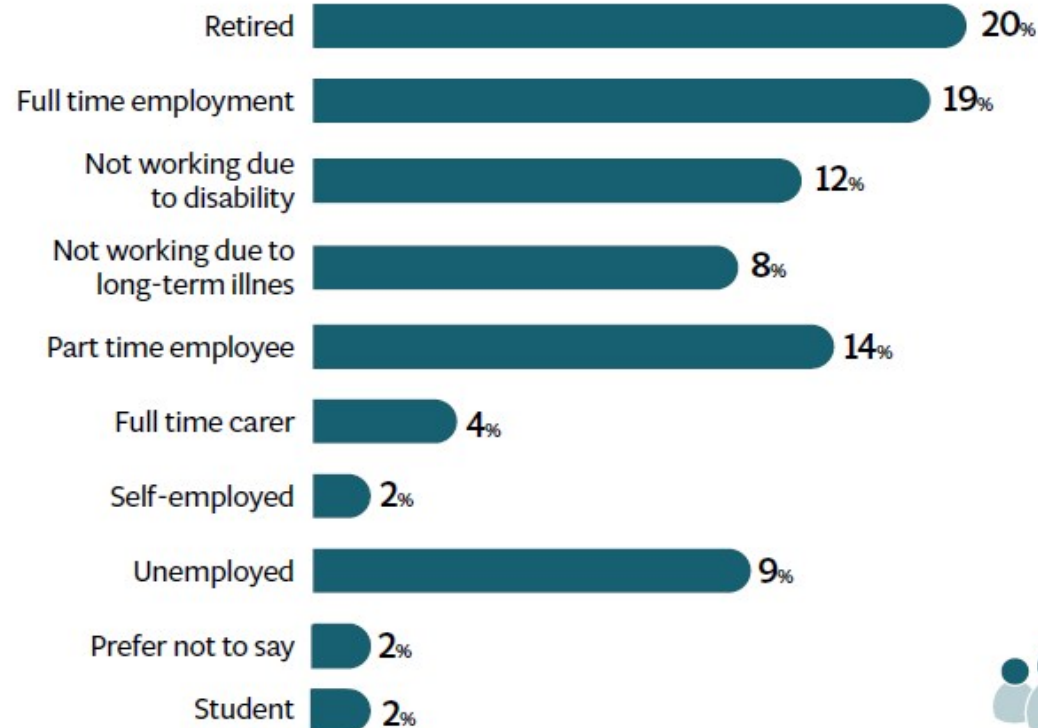


Customer Segmentation

#GOODTOGREAT

Identifying common themes

Employment status



Around **32%** have a household income of less than £10,000



18% of customers are carers

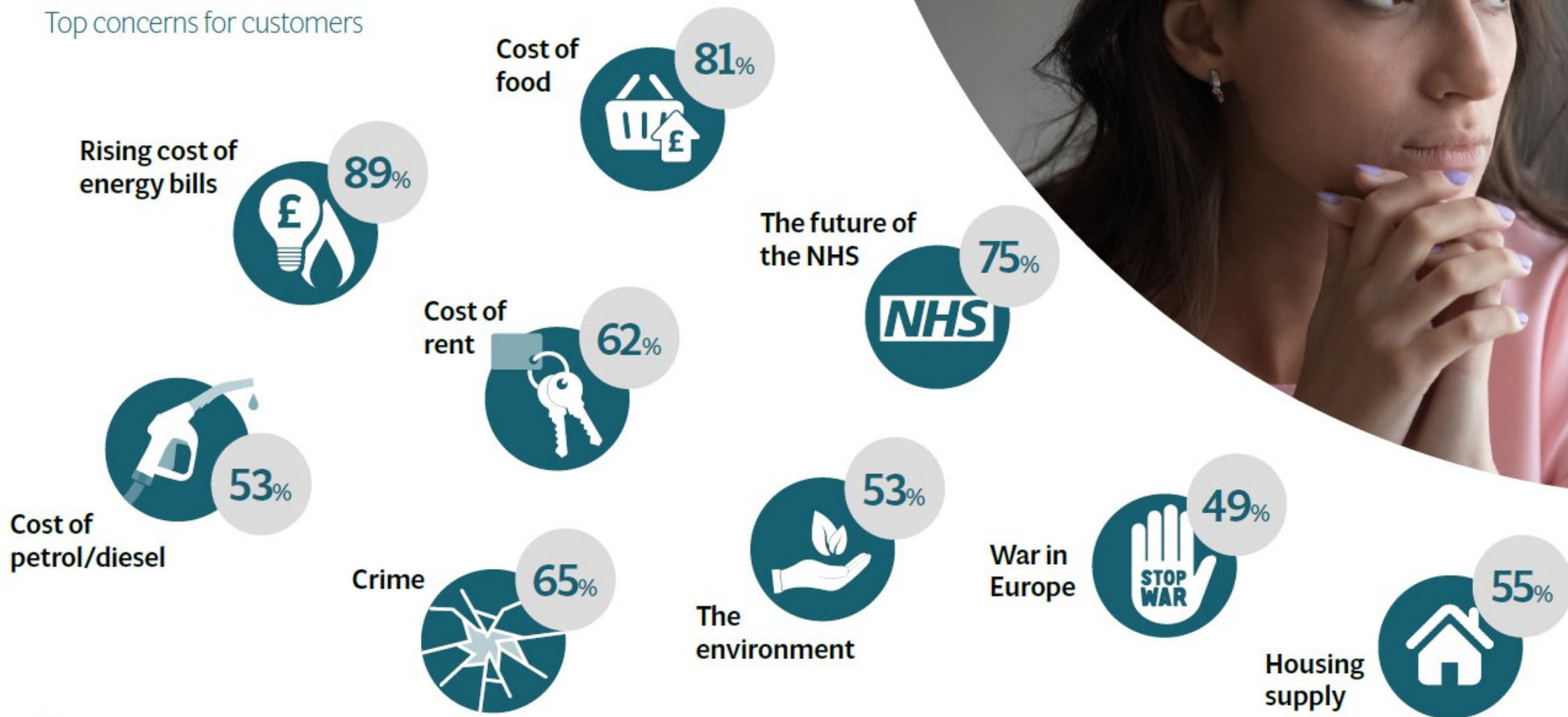


Customer Segmentation

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Identifying common themes

Top concerns for customers



Key segment comparisons

It is helpful to see ‘at a glance’ how the six segments compare to each other. The first columns show the total for all customers.



Conditions affecting day to day life (%)

Depression	38	7	25	23	53	66	89
Anxiety	41	9	24	34	63	62	85
Insomnia	12	5	14	7	9	19	25
Dyslexia	4	2	4	4	7	4	9
PTSD	6	1	0	2	12	4	25
ADHD	3	2	0	2	7	1	5
Fibromyalgia	6	1	7	0	1	21	11
Eating disorder	3	0	2	0	5	5	10
ASD	2	0	2	1	3	2	5
OCD	4	2	3	2	7	5	12



Cognitive difficulties (%)

Keeping a conversation going	19	1	8	8	34	32	58
Following a conversation	14	2	6	4	20	23	54
Difficult to make phone calls	42	11	39	25	61	73	82
Difficulty reading	16	4	14	7	22	31	41
Difficulty understanding letters	23	8	32	11	19	31	67
Ignore letters that look official	17	6	9	16	20	19	54
Leave paperwork to someone else	19	8	25	10	13	33	47
Understanding financial information	17	4	17	7	16	28	55



Deliver



Flex



Boost



Reassure



Assist



Nurture



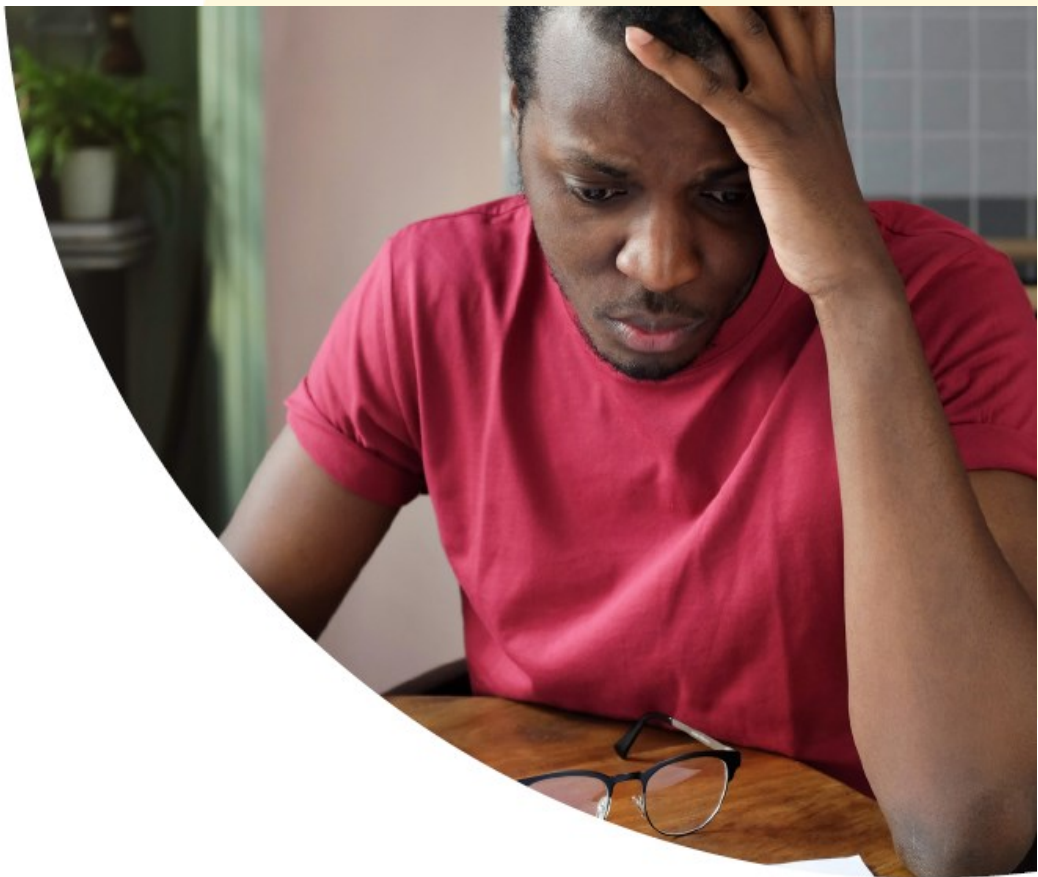
Personal feelings (%)

I feel anxious most of the time	53	6	31	45	89	91	98
I feel lonely a lot of the time	38	11	31	25	56	60	76
I find it easy to complain if I need to	57	81	70	68	37	38	17
I feel isolated in my home	24	2	20	11	37	39	69



Financial perspectives (%)

I struggle to pay my bills each month	33	6	19	35	50	37	75
I'm very good at managing my money	58	89	79	48	37	58	13
I am in debt and struggling to pay it off	30	7	10	35	55	20	75
I have little or no savings	69	37	61	79	83	77	90



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Customer Segmentation – next steps

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- Segmentation findings to be included in design of our new Resident Engagement Strategy (will also support the RES required for the Building Safety Act)
- Promote a wide range of channels for customers to advise us of their needs or vulnerabilities
- Development of tailored communication methods, App notifications, SMS, Letter, Face-to-Face, etc
- Service Planning & Policy development and reviews to consider options for variable service offers, subject to compliance with Equality Act
- Enhancing data and predicative analytics to consider probability of different 'segments' experiencing DMC related issues.

Predictive Analytics

- Developed Predictive Analytics model with NEC
- Centralises relevant data sharing and review
- 'Predicts' homes 'at risk' of DMC using 134 elements of household and environmental data
- Informs and validates investment planning
- Will be used to refine stock condition survey programme
- Field testing proves high reliability, further refinements in progress
- New integration of 'Account (rent) Analytics' data
- Caseload Manager under development to produce targeted tailored mailing/communication for households
- API's under development to import IoT data points

Predictive Analytics

Common Predictor variables for Damp and Mould



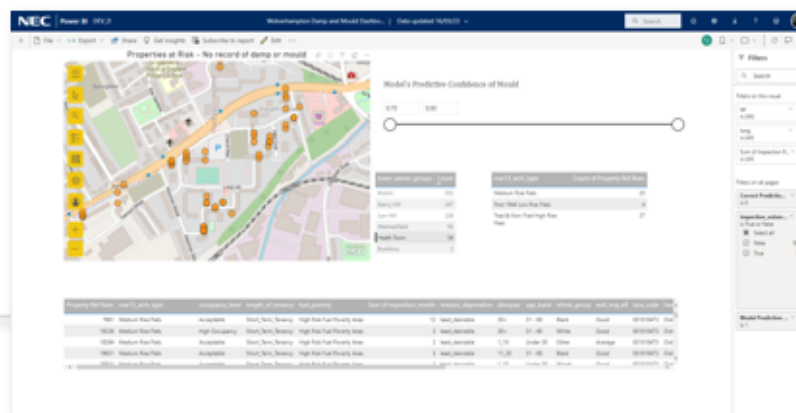
Property

- Age and condition of housing stock
- Architecture type (MRA13)
- Energy efficiency (EPC)/(SAP)
- Insulation / Damp Proofing
- Number of repairs Floor Level – Basements/Upper level



Places

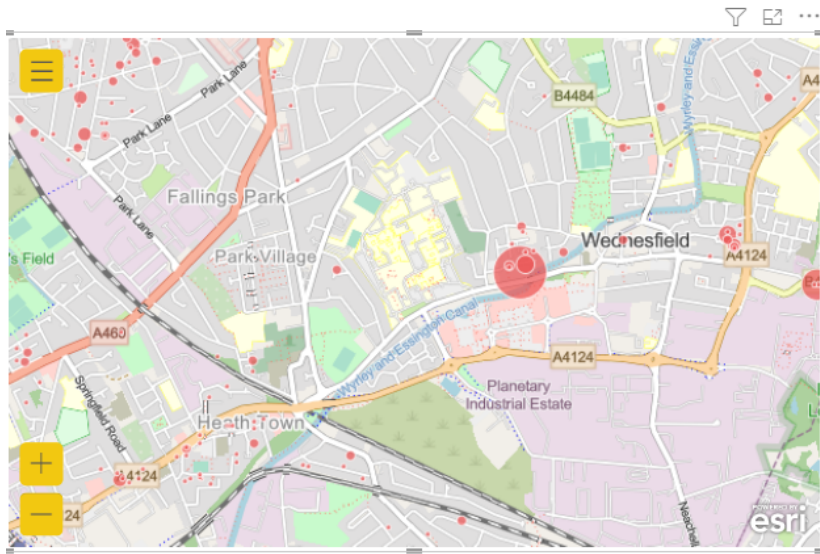
- Deprivation Scores (IMD 2019)
- Indoors Deprivation – Sub-Domain (IMD)
- Lower Admin Units



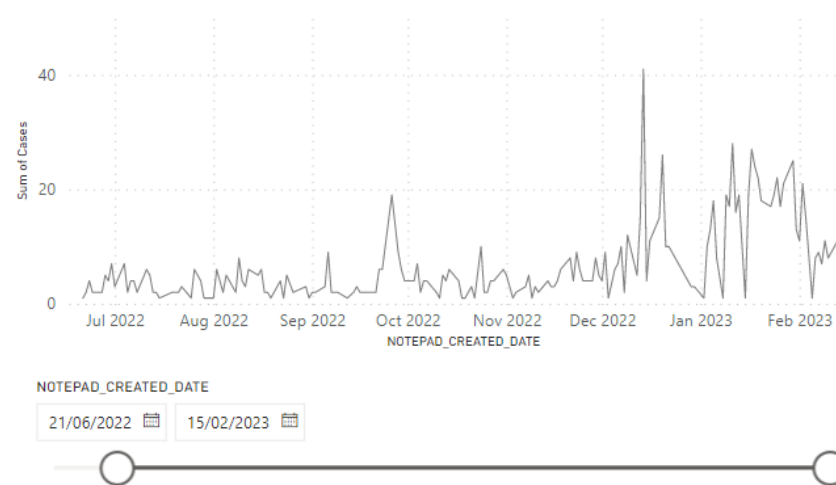
People

- Household demographics –Age Group
- Employment Status of Tenant
- Fuel poverty indicators
- Rent Payment Activity
- Over Occupancy Indicator
- Sociodemographic Groups
- Vulnerability Flags
- Length of Tenancy

Predictive Analytics



Time Series - Number of Notepad records with Mould

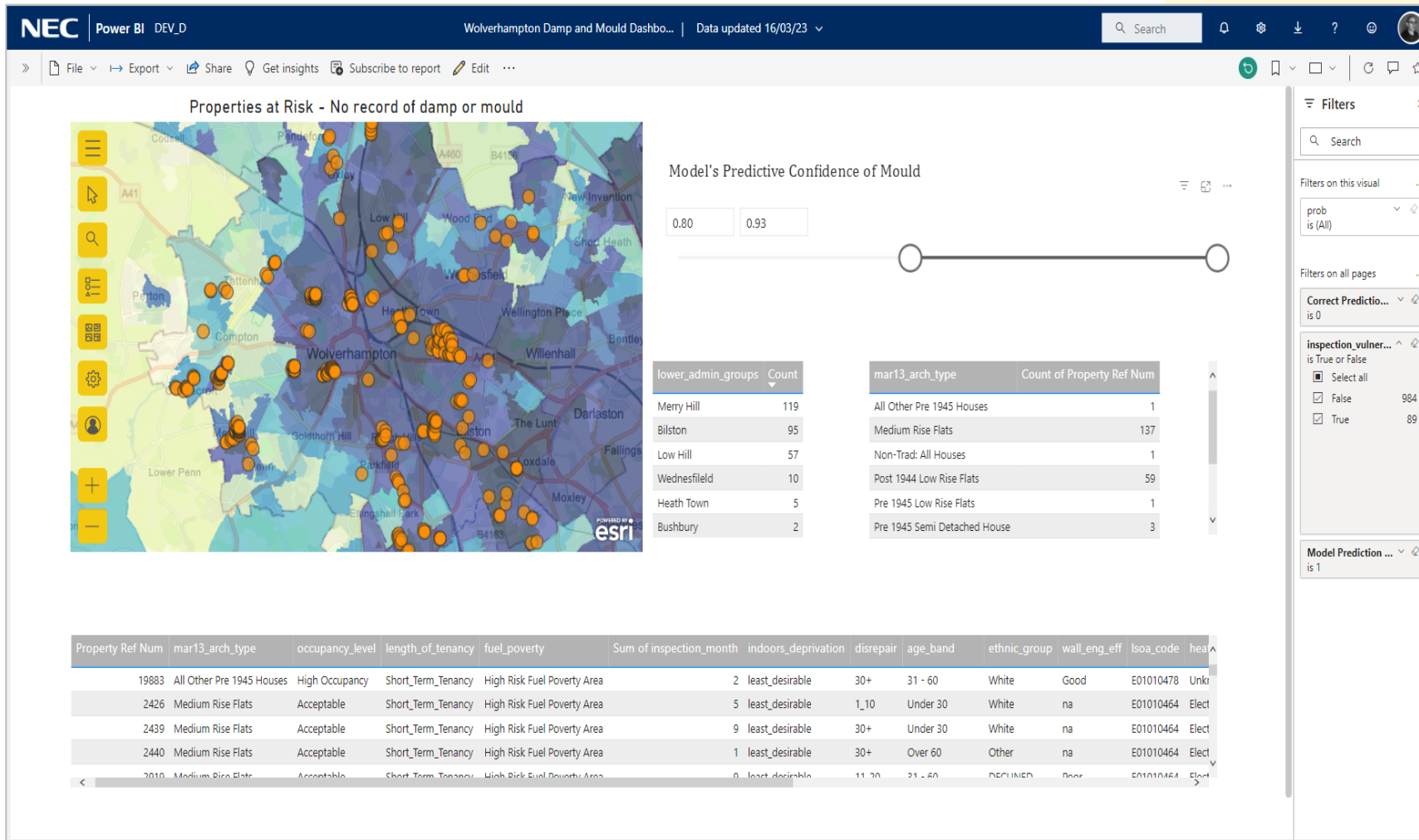


	Mould_Flag	Vulnerability_Flag	Severity_Flag	Elderly_Flag	Disability_Flag	Property_Type	SUB_TYPE_NAME	TENANCY_REFERENCE	DEFECT
ssed any issues with DMC, there was an issue with a leak in 2021, this has been fixed issues with DMC no visited required. Completed form over phone.	True	False	False	N	N	Flat	Low Rise (1-2 storeys)	88382	N
oday as part of the DMC taskforce, Mrs [REDACTED] has no issues with Damp or Mould at all is d a bedroom door not closing which I will report to HD for her....Moh DMC Taskforce	True	False	False	N	N	Flat	Low Rise (1-2 storeys)	93987	N
upport for 12 month no contacts, audit form etc all saved on enterprise under tenancy	True	False	False	N	N	Flat	Medium Rise (3-5 storeys)	92712	N
eduled a roof repair and inspection for damp and mould	True	False	False	N	N	Flat	Medium Rise (3-5 storeys)	94555	N
1054/2 - [REDACTED] advised the scaffolding has been removed and repair is showing as vised that water has been dripping from the same spot on the roof today, this is now es and he would like a call back asap to discuss this further, Please call [REDACTED]	True	False	False	N	N	Flat	Medium Rise (3-5 storeys)	94555	N
issues in his bathroom whilst on the phone to him today - I did ask him to report this ebsite but can you raise a ticket as he said he needs an inspector to look at this as he s the reason the damp is being caused in his flat.	True	False	False			Flat	Low Rise (1-2 storeys)	85365	N

- Flags for mention of Mould / Health Wellbeing from Business Action Text Field
- Sentiment Score reflect urgency of raised issue – Filter most critical cases
- Time series for seasonality analysis of Mould and/or Health Issues
- Map show location of Mould – Spatial distribution of Mould cases
- Map can apply layers showing external features – deprivation / air quality etc
- Map could also colour code – HIGH RISK properties (Outcome of the predictive model)

Predictive Analytics – finding the silence

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- Full view of stock where there is risk of damp and mould
- Mapping layers can be added e.g. Flooding Zones
- Example shows – Index of Multiple deprivation (IMD 2019) – Darker Blue = Greater deprivation
- Identify trends and correlations in property attributes e.g. lowest performing and best combinations to inform future investment

Predictive Analytics – Case Management

Caseload Summary Categories

Q

Go

1. Intelligent caseload

Actions

Intelligent caseload

4 Selected, Poor payers Intellig..., Good payer Intellige..., Intelligent interven...

Sel	Category	Description	No. ↓	Processed	Left	No. In Category
Include	INTEIGOOD	Early intervention good payers in arrears getting worse	158	0	158	544
Mandatory	DAMP	Damp works predicted in coming month	158	0	158	4991
-	EPCRATES	Accounts regardless of balance linked to property with poor EPC rating A being best G being lowest	158	0	158	21017
-	CURRENT	Current REN residential accounts	158	0	158	21263
-	VGITMON15	INTELLIGENT CASELOAD: Very good credit monthly 28 payer	158	0	158	4520
-	NOCONOVOAR	No Contact within 14 days and no Arrears Arrangement VOAR	20	0	20	1624
-	5WEEKS	Accounts in arrears 5 weeks or more net rent no arrears arrangement no UC indicator and payment method of CR	3	0	3	219
-	HBMISSED	HB recipient with HB stopped and payment CR	1	0	1	73

1 - 8



Predictive Analytics – Case Management

Caseload

Q v

Actions v

Example Damp team caseload

Primary Category, Primary Cat Descript...

14 Escalation suspended, Arrangement shortfal..., Payment overdue, Arrears increasing, Arrears decreasing, EPC A, EPC B, EPC C, EPC D, EPC E, EPC F, EPC G, Active user un

Primary Category : DAMP, Primary Cat Description : Damp works predicted in coming month

	User	Payment Reference	Damp works days ago	Confidence damp works needed %	Food parcel	Tenant Name	EPC	Address	Years at address	Last pay type	Since last wk	Wks till zero	Wks owed	Actual Balance	Next wks bal	Change HBS	Pay freq	Days Since Pay
	HOU	0000030B	49	99	0		D		35.52	POPAY	Up £25.04	-	0.74	77.40	102.44	-76.77	28	15
	HOU	0000094K	112	84	0		D		41.25	HBS	Static	-	0.03	2.76	2.76	2.76	7	6
	HOU	0000356E	-	85	0		D		35.48	HBS	Static	-	-1.45	-164.00	-164.00	0.00	7	6
	-	0000407C	-	72	0		D		36.42	INNET	Down £6.25	15	1.86	193.45	187.20	0.00	35	25
	-	0001065N	49	98	0	MR	D		36.09	DD	Down £73.67	-	-2.24	-223.29	-296.96	0.00	28	5
	-	0001191F	91	98	0	MR & MRS	D		39.91	DD	Static	-	0.00	0.00	0.00	-	7	4
	HOU	0001257B	217	100	0		D		47.98	POPAY	Static	-	-0.87	-78.89	-78.89	0.00	7	4
	HOU	0001292N	-	76	0		D		38.62	DD	Up £13.01	18	-3.84	-384.42	-371.41	32.05	32	11



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