

THE BUTTERFLY SKIN CHARITY

Help stop the pain of EB

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Epidermolysis Bullosa Patient Insights

Quantitative Research Presentation

June 2023 / JN4286



About Synergy



Full-service research agency with a broad range of expertise in healthcare

We carry out market research in a wide range of therapy areas among health professionals, payers and patients.

We are big enough to carry out the largest projects and small enough to care about even the smallest projects.



Award-winning patient research

We have particular expertise conducting research amongst patients -including twice winning the BHBIA BOBI Award for Best Patient Centric Approach.

Our most recent award in 2022 was for research looking into the impact of delayed diagnosis amongst multiple myeloma patients, working with Myeloma UK. We also won in 2020 for research with Psoriasis UK and LEO Pharma on the 'Wake up to Psoriasis' campaign.



Extensive experience researching dermatology and rare disease

We have conducted numerous research projects exploring the management of skin disease, including psoriasis, eczema, actinic keratosis and skin cancer. We also have significant expertise conducting research in rare diseases, with recent research covering haematological, metabolic and genetic rare diseases. Research will be designed and interpreted in the context of our extensive knowledge of this therapy area to provide deeper insights and more powerful recommendations.



Award winning expertise in a wide range of research approaches

Our expertise in a wide range of research approaches is demonstrated by awards presented to Synergy in categories encompassing most types of research including: Best Customer Insight Best Business Impact Sales Force Effectiveness Research Communication Research Excellence in Data Collection & Fieldwork

Foreword



The 2023 EB Insight Study is our most comprehensive patient-centric research to-date, providing us with a baseline of invaluable data from those who know and understand Epidermolysis Bullosa best: the EB community.

Over 200 people with different types of EB, over 100 carers, 50 dermatologists, and 100 GPs contributed to the study. Hearing the voices of those with and those impacted by EB is critical to our understanding of this debilitating condition.

Responses to the study came from across the UK, from a split of genders and across a range of ages. This diversity of thought confirms and informs our direction of travel in our fight against EB, leaving no-one with EB behind. Further, it will underpin a step-change in our planning and our actions.

For example, the responses will guide our frontline services to ensure they are in line with the needs of the EB community and focus our research on the areas that matter most to EB patients. The Study also provides us with a body of quantitative and qualitative data which serves as a foundation for our national advocacy and lobbying endeavours, while offering pharmaceutical companies the data they need to make targeted progress on treatments. And, ultimately, the findings of this study will inform our search for cures.

This is just the starting point; we will continue to involve the EB community in the next phases to ensure that we get services right for people with EB today and that we increase support and funding to enact change for people with EB tomorrow.

Carly Fields - DEBRA Vice Chair of the Board

Executive Summary

Conclusions and recommendations

EB has a high symptom burden, with many of the symptoms experienced by most patients having a high impact on daily life

That being said, life with EB is highly variable – the type of EB does not necessarily correlate with severity, and the worst days can be considerably worse than an average day – **beware of making assumptions** about what patients are going through and what they are capable of at any one time

Symptoms are again highly variable and cause significant impact on QoL – the 'lows' of patients with variable or seasonal symptoms can feel particularly low, and they can struggle to be understood by HCPs

Foot blistering is particularly impactful and may need to be an area of focus

EB has a significant impact on mental health, and for carers and DEB patients in particular – consider more carer focused solutions

Teenagers and young adults with EB need more tailored support across the board – potential gap resulting from service transition

Difficulties with HCP interactions evidences need for HCP education (see next section)

Effective symptom management, treatments or therapies severely lacking for EB – all patients using something different or nothing at all, rely on recommendations from others

Delayed presentation and referral are obstacles to timely diagnosis – particularly for SEB and patients with seasonal symptoms

A significant amount of EB patients are not under specialist care – whilst some feel they don't need this, the remainder are coping on their own or potentially held in local primary / secondary care

Even when under specialist care, access is difficult for some patients to achieve re travelling and frequency of appointments **not tailored to patient needs**

Whilst many aspire towards a cure for EB, when time frames and limited funds are taken into account **the development of new treatments take priority**

GPs appear to have reasonable spontaneous awareness of the signs and symptoms of EB – but difficulty exists around recognising these in practice and referring EB correctly, in both primary and secondary care, despite many HCPs having seen an EB patient

Destigmatise the complexity of managing EB and ensure links with specialist services are possible to increase HCP confidence in shared care arrangements, even for more complex patients

There is a need for better communications with specialist centres around role of primary care and local secondary care – primary care expect to manage antibiotics and pain management for EB patients, but need for clarity around who is responsible for bandages, bloods and needles, and what is covered by specialised commissioning

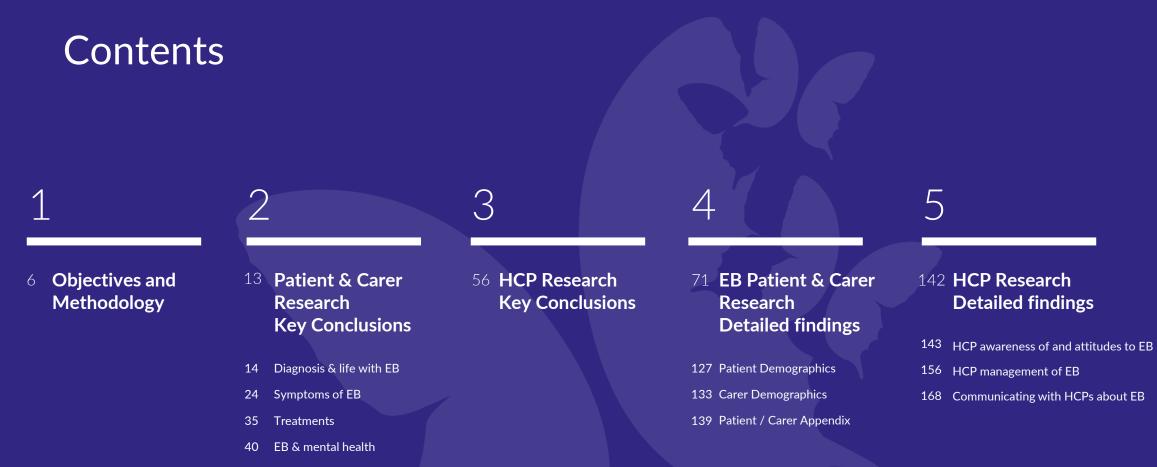
Need for education around ability to refer directly to specialist services and when this should be done – currently, some patients are being managed entirely within local secondary care

Prescriptions for specialist bandages need to specify exact type of dressing and justify why it is being prescribed to overcome any formulary barriers

• Assistance may also be needed for pharmacy re: how to order stock

In theory HCPs are receptive to more information about EB, but this should target the most effective channels and sources to ensure engagement

Positive reactions to a 'GP' pack of information – HCPs more likely to use information with NHS and specialist centre endorsement



- 45 EB carers
- 47 Attitudes to DEBRA

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Methodology & Sample

Methodology

20 minute UK online survey with EB patients / carers

15 minute UK online survey with GPs & Dermatologists

Conducted April-May 2023

Preceded by qualitative depth interviews with 19 EB patients/carers and 9 EB specialists conducted Jan-Feb 2023

HCP Quantitative Sample

50 Dermatologists Derms

82% have seen at least 1 EB patient / last 5 years

88% Consultants 12% SpRs

All not working at an EB specialist centre

GPs 100 GPs

58% have seen at least 1 EB patient / last 5 years

Patient Quantitative Sample

318 Total Respondents

Patients	215 Patients
Carers	103 Carers (9

103 Carers (90 current carers, 13 past carers)

EB Types			
61% EB Simplex	SEB	31% Dystrophic EB	DEB
4% Junctional EB	JEB	2% Kindler EB	KEB
15% Recessive Dystro	phic (51% of DEB)	DEB
12% Dominant Dystro	phic (4	40% of DEB)	

3% were unsure of diagnosis

Patient & Carer Sample Demographics







DEBRA membership						
90% Members	10% non-members					
Age of patient						
Baby / Toddler	6%					
Child	12%					
Teenager / Young Person	7%					
Adult (21-40)	29%					
Adult (40-60)	25%					
Adult (61+)	21%					

Ethnicity	
92% White	5% Asian / Asian British
<1% Black / Black British	<1% Arab
<1% Mixed / Multiple ethnic group	3% Other / Prefer not to say

Locations	
England	80%
North England	15%
East England and the Midlands	25%
South England	40%
Scotland	14%
Wales	4%
Northern Ireland	2%

Patient Gender	
63% Female	34% Male
<1% Non-Binary	
Carer Gender	
81% Female	18% Male
<1% Non-Binary	

HCP Sample Demographics

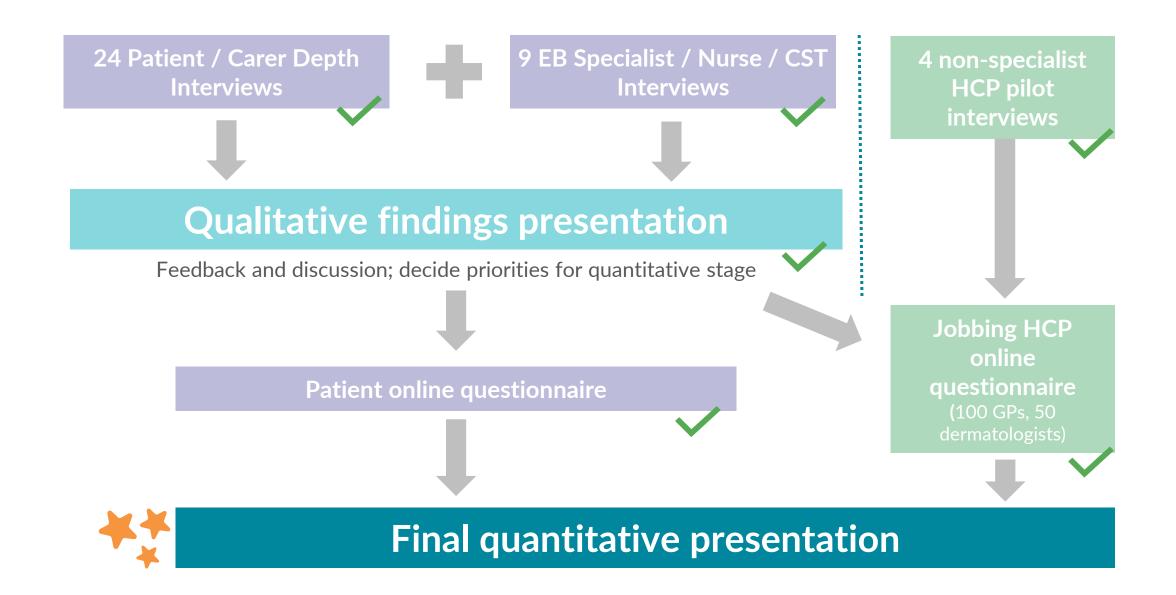
Location	GPs	Dermatologists			
England	95%	84%			
Greater London	23%	18%			
North East/West	17%	10%			
Yorkshire / Humber	7%	4%			
East / West Midlands	19%	12%			
East	8%	10%			
South East/West	31%	30%			
Scotland	2%	12%			
Wales	2%	2%			
Northern Ireland	1%	2%			
Gender GPs	;	Dermatologists			
Female	53%	50%			
Male	45%	46%			

Dermatologist Setting

Specialist Dermatology Centre	0%		
University Teaching Hospital	74%		
Non-University Teaching Hospital / DGH	26%		
Dermatologist level of interest in EB			
Lead for our hospital for EB	0%		
Greater interest in EB than any other area of dermatology	4%		
Greater interest in EB along with a number of other areas of dermatology	36%		
Less interested in EB than other areas of dermatology	60%		

GP – level of interest in dermatology	
GPwER (GP with extended role) in dermatology and skin surgery	1%
GPwSI (GP with special interest) in dermatology	5%
Lead GP for dermatology in my practice	6%
Other special interest / role in dermatology	13%
None of the above	80%
Area practice GPs	
Urban 40%	
Suburban 52%	
Rural 8%	

Where we are now:



Objectives

Marketing Objective:

Improve DEBRA's understanding of and engagement with the EB community



Detailed research objectives – patients and carers living with EB



What it's like to live with EB

- Details of what its like to live with
 EB: how long patients have had the condition, where they are affected, what the physical symptoms are like and the limitations caused by these
- Triggers for symptoms / worsening symptoms
- Patient Journey: initial diagnosis,
 HCP support offered, treatments
 offered (and the impact of these),
 and general perception of
 healthcare support provided
- Non-HCP support provided
- Daily routine looks like living with EB: what's involved, how long does it take
- Understand unique challenges of each EB subtype



Impact of EB

- Impact of EB on daily life: such as mobility, eating, sleep and hygiene, social life, education, career, aspirations, and travel
- Mental health of both patients, carers, and other loved ones:
 - Explore key triggers for mental health
 - Explore the symptoms that have the greatest impact on mental health
- Coping mechanisms: Physical and emotional techniques used
- Pain relief: uses and concerns patients have regarding frequency of pain relief
- Understand satisfaction with treatments and current support
- EQ-5D questionnaire
- Cost of living crisis



Aspirations for the future

- Provide insights into patients' aspirations for the future, including
 - Improvements that would improve their QoL
 - Aspirations in terms of treatments and understanding of EB
- Understand patients' priorities for future funding: i.e. drug repurposing, researching a cure, or immediate relief and care



Patient views of DEBRA

- Assess services and support patients would like to see DEBRA provide
- Assess patient perception of DEBRA's performance
- Understand patient need for further provision of support, including:
 - Online members forum
 - Local support and connection with people like themselves
 - More inclusive communication and events

Detailed research objectives – HCPs



Identification and Diagnosis

- Assess HCP awareness and knowledge of EB
- Explore issues around identification, diagnosis and support of patients with EB
- Identify current barriers to quick identification and diagnosis



Patient Care

- Where are the gaps in terms of support HCPs can offer patients
- Barriers and Obstacles in system: what is preventing optimal EB patient care e.g., GPs not aware able to refer out of area for EB, incorrect dispensing of dressing prescriptions
- Extent of HCP involvement in EB patient care
 - Understand HCP perception of which EB patient issues should be managed locally vs by specialist consultation (e.g. conditions unrelated to EB such as flu)



Reactions to possible support options

- Outreach clinics: HCPs attitudes to outreach clinics
- **GP Pack:** Explore GP reactions to Patient guided packs and determine optimal source and format
- Understand HCP satisfaction with current EB care



Communications and Reactions to DEBRA

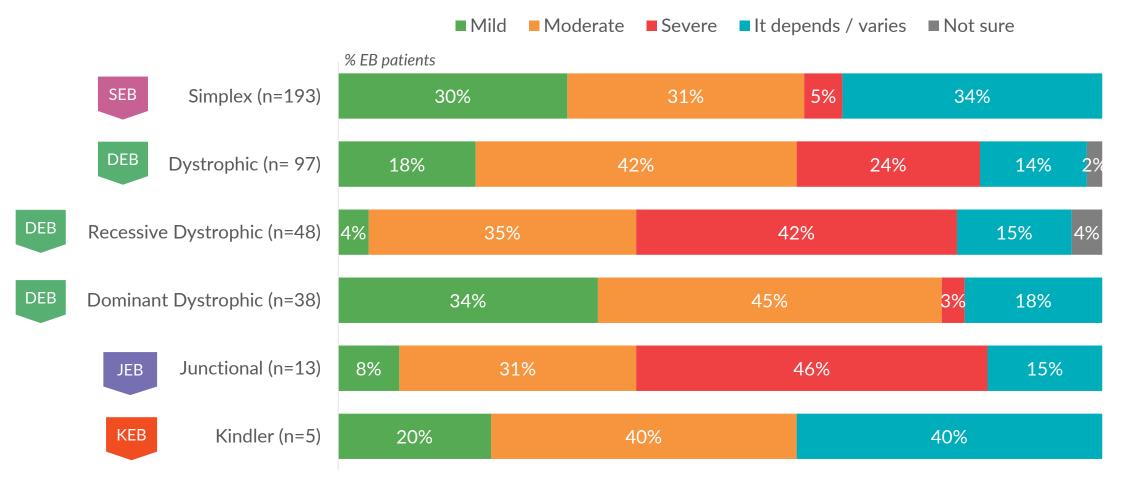
- Assess dermatologist and primary care awareness and opinions of DEBRA
- Communication: Identify mostused HCP sources of credible information including journals & websites; understand extent to which clinical best practice guidelines valued / used

Patient & Carer Research Key Conclusions

Diagnosis and life with EB

Only 30% EB Simplex patients have 'mild' EB; for a third it depends / varies 42% Recessive Dystrophic patients have severe EB vs only 3% Dominant Dystrophic

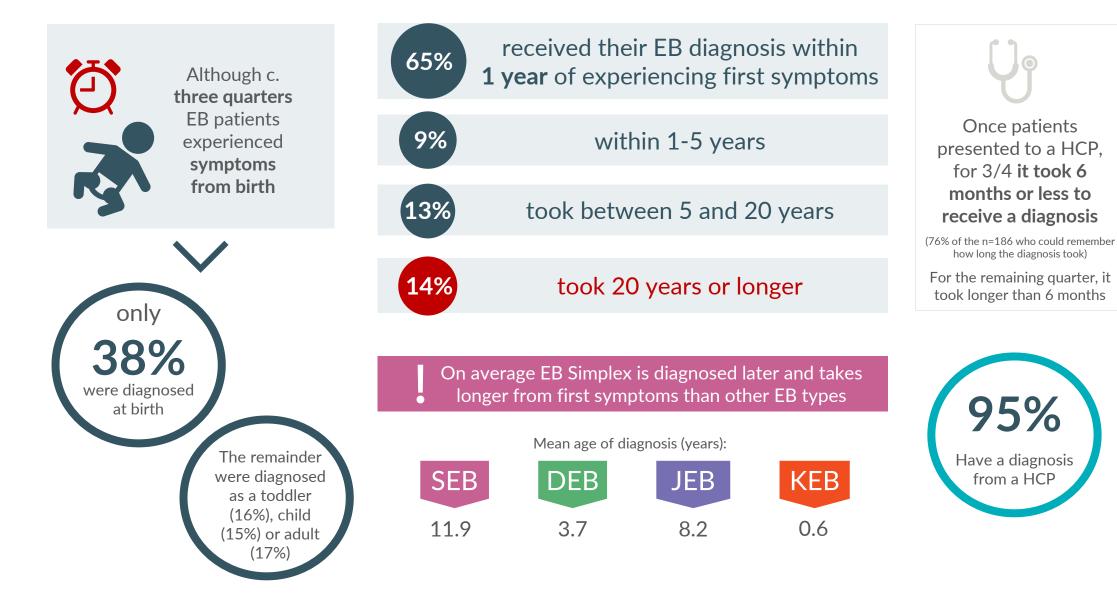
Would you consider your (/the person you care for / cared for's) EB to be...



Base 318 (215 Patients, 103 Carers)

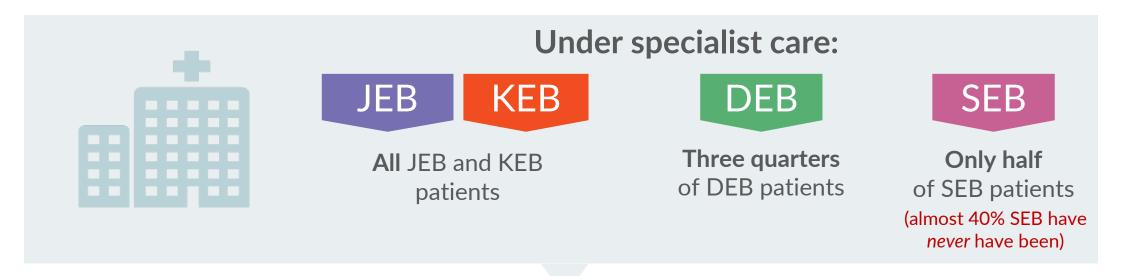
D1 Would you consider your (/the person you care for / cared for's) EB to be...

Many EB patients experience delays in their diagnosis – though this could be due to delayed presentation



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Two fifths of EB patients are not under the care of an EB specialist hospital



Overall 40% EB patients are not currently under EB specialist care, including 12% who previously were but no longer are

Only 23% of those not under care agree they don't need access and are coping fine as they are

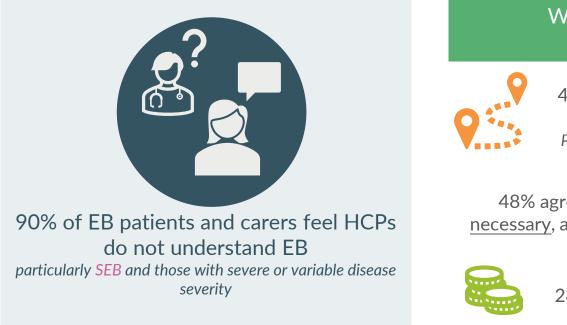


Around half of EB patients attend medical appointments or see HCPs about their EB or relevant issues once to few times a year

Two fifths see HCPs more rarely, less than once a year, whilst for a minority it's very frequent at once a month or more

DEBRA members, younger patients, ethnic minority patients and patients in the south of England are most likely to be under EB specialist care Patients who are older, white, and from Scotland or North England are more likely to have disengaged from specialist care or not be under specialist care at all

Just over half EB patients/carers would like more contact with the specialist service – but individual needs and situations vary considerably



85% have had to educate GPs on EB themselves particularly carers of young children and females

54% do not feel listened to by healthcare professionals

Whilst 54% would like more contact with specialist services...

48% agree <u>travelling to specialist centre is difficult</u> and can <u>cause EB to flare up</u> Particularly those with severe disease, of an ethnic minority, or in North England Carers

Patients

48% agree travelling to specialist centre is <u>not always</u> <u>necessary</u>, and 45% agree by the time they get to see a HCP their <u>problem has become irrelevant</u>

28% agree they struggle to afford to travel to appointments

32% feel access to specialist services isn't needed, they're coping fine as they are – particularly older adults (61+), those with SEB, mild disease, and those not under the care of a specialist centre



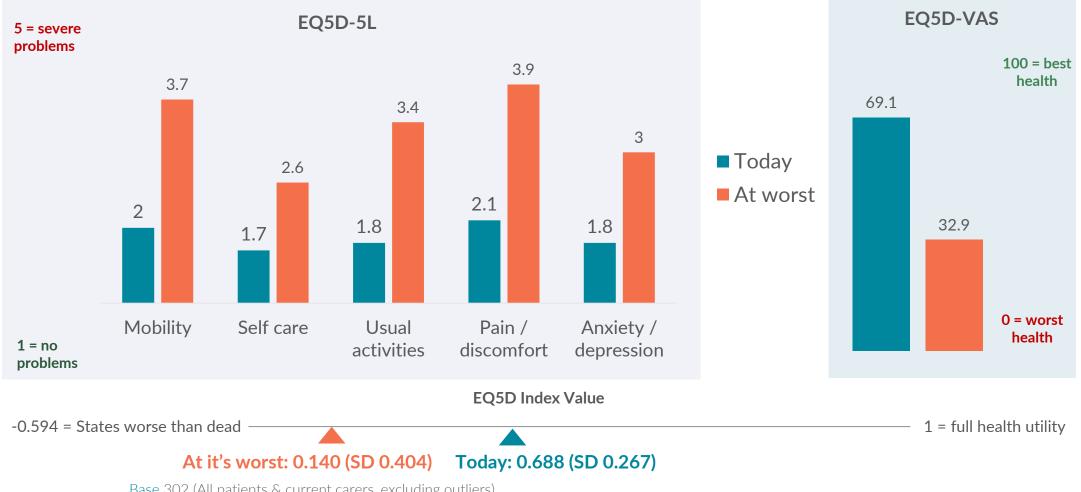
Specialist services need to be responsive to patient situations

EQ5D QOL assessments were completed twice – once to assess the patient's health **today**, and again for when their EB is **at it's worst**

Mobility I have no problems in walking about I have slight problems in walking about I have moderate problems in walking about I have severe problems in walking about	Best imaginable health state
I am unable to walk about	
Self-care I have no problems washing and dressing myself	90 =
I have slight problems washing and dressing myself I have moderate problems washing and dressing myself I have severe problems washing and dressing myself	80
I am unable to wash or dress myself	70 -
Usual activities (e.g. work, study, housework, family or leisure activities) I have no problems with performing my usual activities	60
I have slight problems with performing my usual activities I have moderate problems with performing my usual activities I have severe problems with performing my usual activities	50
I am unable to perform my usual activities	40
Pain / discomfort I have no pain or discomfort	30
l have slight pain or discomfort I have moderate pain or discomfort I have severe pain or discomfort	20
I have extreme pain or discomfort	10 +
Anxiety / depression	
l am not anxious or depressed I am slightly anxious or depressed	0]
I am moderately anxious or depressed I am severely anxious or depressed I am extremely anxious or depressed	Worst imaginable health state

EB patients experience problems across all EQ5D dimensions, particularly pain and discomfort; volatility of life with EB is evidenced by disparity between EQ5D measures on a typical day vs when EB is at its worst

Patients Carers



Base 302 (All patients & current carers, excluding outliers)

Q36 Which of the following best describes your / the person you care for's level of problems with....

Q37 & Q38 On a scale from 0 to 100 (where 100 is the best health you could imagine and 0 is the worst health you could imagine) please indicate below how you feel / how you would describe the health of the person you care for, today / when EB is at it's worst

Index value calculated using EQ5D-5L to 3L crosswalk and UK Dolan values

EB can be volatile, impacting many aspects of patient's lives

1 = full health utility **Everyday mobility** When at it's worst Todav Hobbies Exercise Self-confidence / physical activity - SEB: 0.738 64% 77% 61% 70% JEB Total EB population: 0.688 DEB: 0.601 Enjoying life Work / study Mental health Planning for future **KEB: 0.511** 60% 57% 51% JEB: 0.483 **KEB: 0.286** Total EB population: 0.140 Aspirations for Time with family / Independence Sleep DEB: 0.141 friends 45% 47% SEB: 0.128 43% JEB: 0.092 -0.594 = states worse than dead Intimate Carrying out simple Personal hygiene relationships dailv tasks Whilst on a typical day the health of SEB patients and those with variable 38% severity is relatively high, when at its worst health is impacted considerably, and 42% 41% JEB SEB patients can struggle severely with mobility On a typical day... For JEB and severe patients, across all dimensions a typical day is more 81% patients spend time on blister / wound care, taking one hour on similar to their worst day with EB - mobility, self-care, usual activities and pain are consistently impacted average 85% spend time on personal hygiene e.g. taking an average 1.2 hours र्द्रस्त 67% spend time on resting / recovery, for an average 4.1 hours At their worst, DEB patients are more likely to experience problems with anxiety/depression Severe patients spend more time on blister / wound care, personal hygiene, food preparation, getting dressed and resting daily JEB patients spend more time on food preparation daily

EQ5D-5L

Patients Carers

Many different aspects of life of patients' lives are impacted by EB...

Whilst on a typical day the health of SEB patients and those with variable severity is relatively high, when at its worst health is impacted considerably, and SEB patients can struggle severely with mobility

For JEB and severe patients, across all dimensions a typical day is more similar to their worst day with EB – mobility, self-care, usual activities and pain are consistently impacted

Patients

Carers

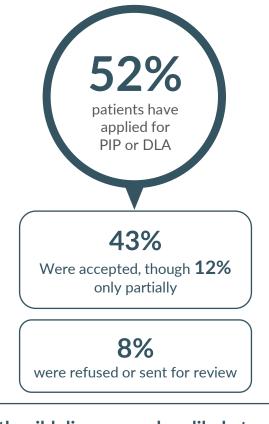
At its worst, DEB patients experience the poorest health and are sightly more likely to experience problems with anxiety/depression

Mean			ЕВ Туре			Respondent Type		Severity			
(1 = no problems, 5 = severe problems)	Total	SEB	DEB	JEB	KEB	Patient	Carer	Mild	Moderate	Severe	It depends
Base	302	189	90	10	4	214	88	83	105	30	82
Mobility - Today	2.0	2.0	2.2	3.0	2.5	1.9	2.4	1.3	2.2	3.3	2.1
Mobility - <mark>At its worst</mark>	3.7	4.0	3.2	3.7	3.0	3.7	3.8	2.9	3.8	4.5	4.1
Self care - Today	1.7	1.5	2.0	2.9	2.3	1.5	2.2	1.1	1.7	3.4	1.6
Self care - <mark>At its worst</mark>	2.6	2.4	3.0	3.3	3.0	2.4	3.0	1.8	2.7	4.2	2.6
Usual Activities - Today	1.8	1.7	1.9	2.7	2.5	1.6	2.2	1.2	1.9	2.9	1.9
Usual Activities - At its worst	3.4	3.6	3.3	3.6	3.3	3.4	3.7	2.7	3.6	4.5	3.7
Pain / discomfort - Today	2.1	1.9	2.4	2.6	2.3	1.9	2.5	1.5	2.2	3.2	2.1
Pain / discomfort - <mark>At its worst</mark>	3.9	4.0	3.8	4.2	3.0	3.8	4.0	3.2	3.9	4.7	4.2
Anxiety / depression - Today	1.8	1.6	2.0	1.6	2.8	1.8	1.8	1.4	1.8	2.7	1.7
Anxiety / depression - At its worst	3.0	2.9	3.4	2.8	3.5	3.1	3.0	2.4	3.1	4.3	3.1
Mean (0 = worst health, 100 = best health ima	ginable)										
VAS - Today	69.1	73.1	60.9	66.6	60.5	70.3	66.4	80.9	64.4	50.5	70.2
VAS – <mark>At it's worst</mark>	32.9	34.2	28.7	33.4	42.0	33.7	31.2	49.5	28.7	19.4	27.1
Index Value (0.594 = States worse than dead, 1 =	= full health u	ıtility)									
Index Value – Today (SD)	0.688 (0.267)	0.738 (0.251)	0.601 (0.267)	0.483 (0.347)	0.511 (0.313)	0.737 (0.257)	0.571 (0.255)	0.866 (0.128)	0.662 (0.225)	0.279 (0.272)	0.696 (0.247)
Index Value – <mark>At its worst (SD)</mark>	0.140 (0.404)	0.128 (0.402)	0.141 (0.423)	0.092 (0.413)	0.286 (0.208)	0.161 (0.416)	0.088 (0.371)	0.447 (0.329)	0.115 (0.350)	-0.325 (0.232)	0.026 (0.361)
Base 302 (All patients & current carers, excluding outliers)								s with a low base			

Q36 Which of the following best describes your / the person you care for's level of problems with....

Q37 & Q38 On a scale from 0 to 100 (where 100 is the best health you could imagine and 0 is the worst health you could imagine) please indicate below how you feel / how you would describe the health of the person you care for, today / when EB is at it's worst. Index value calculated using EuroQoL recommended EQ5D-5L to 3L crosswalk and UK Dolan values

20% experience difficulties during the PIP/DLA process Two thirds of EB patients and carers have found EB harder to manage during the cost of living crisis



Those with mild disease are less likely to apply, and those with SEB or variable disease more likely to have application refused or only partially accepted



Patients Carers

Two thirds of EB patients and their carers have been impacted by the cost of living crisis

12% are experiencing a **severe impact**

27% are experiencing a moderate impact

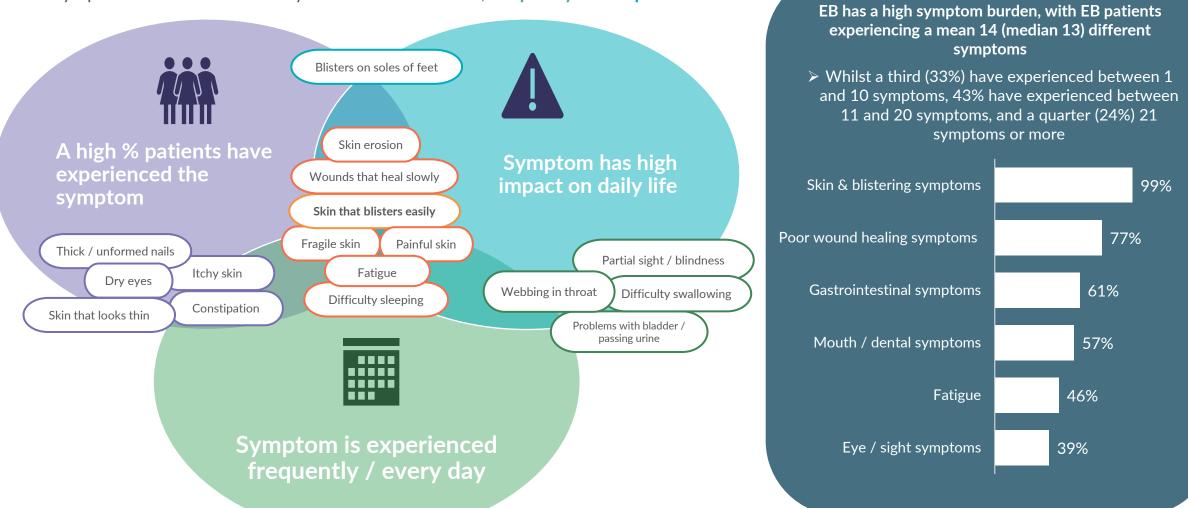
Impact less likely for mild EB and SEB, more likely for severe EB, younger patients and those of an ethnic minority

Symptoms of EB

Most EB patients frequently experience skin that blisters easily and is fragile, highly impacting daily life

Patients

Carers



EB symptoms manifest differently in terms of **incidence**, **frequency** and **impact** on life

EB patients experience a wide variety of symptoms, with 9/10 having skin that blisters easily, 8/10 blisters on soles of feet & fragile skin, and c. two thirds with painful or itchy skin and slow healing wounds



Patients Carers

SkinSkin that blisters easily Blisters on the soles of the feet Fragile skinSymptomsPainful skin99%Blisters on the palms of the hands	90% 78% 76% 69% 68% 60%	Eyes / sight - 39% Dry eye Blistering/irritation in or around the eye Temporary partial sight / blindne Permanent partial sight / blindne	es 7%
Nails that are thick or unformedSkin erosion / breakdown of outer layer of skinBlisters that you are unable to popTiny pimple-like bumps (milia)Skin that looks thinScalp blistering and hair loss (scarring alopecia)Skin cancer8%	54% 54% 0%	GI Painful passing of stool 61% Constipation Anal fissure Reflu Blistering in or around the genitation	on 33% s 32% ix 29% ls 27%
Poor woundWounds that heal very slowly Infected woundshealingLeakage or discharge from wounds77%Smell or odour from wounds	63% 55% 53%	Systemic / other Fatigu Difficulty sleepin Sensitivity to the su	ag 43%
Blisters inside the mouth and throat48Dental problems (tooth decay/teeth falling out)33%Difficulty swallowing (dysphagia)25%Blisters constricting food pipe (oesophagus)19%Webbing in the throat13%	Mouth / dental 57%	Chi Fev Fingers or toes fusing togeth Problems with the bladder / passing urin Breathing difficul	er 12% er 10% e 8%

Base 318 (215 Patients, 103 Carers)

Q13 Which of the following symptoms of EB have you / the person you care(d) for have you ever experienced?

Skin, blistering and wound healing symptoms vary widely by EB type and severity

Patients Carers

% EB patients who have experienced each symptom		ЕВ Туре				Respond	ent Type	Severity			
	Total	SEB	DEB	JEB	KEB	Patient	Carer	Mild	Moderate	Severe	It depends
Base	N=318	N=193	N=97	N= 13	N=5	N=215	N=103	N=83	N=108	N=39	N=85
Skin & blistering symptoms	99%	100%	99%	100%	100%	100%	98%	100%	99%	100%	100%
Skin that blisters easily	90%	92%	89%	92%	60%	89%	90%	84%	92%	97%	89%
Blisters on the soles of the feet	78%	96%	52%	46%	40%	81%	72%	71%	75%	69%	93%
Fragile skin	76%	68%	88%	92%	100%	73%	83%	53%	83%	97%	80%
Painful skin	69%	64%	79%	85%	80%	66%	76%	52%	75%	92%	69%
ltchy skin	68%	56%	90%	77%	100%	67%	69%	55%	77%	85%	61%
Blisters on the palms of the hands	60%	70%	47%	46%	20%	60%	59%	48%	63%	64%	66%
Nails that are thick or unformed	54%	40%	75%	85%	100%	51%	60%	51%	61%	62%	46%
Skin erosion / breakdown of outer layer of skin	54%	43%	74%	69%	80%	51%	61%	42%	57%	90%	46%
Blisters that you are unable to pop	50%	58%	37%	54%	60%	51%	49%	40%	49%	51%	61%
Tiny pimple-like bumps (milia)	43%	31%	73%	15%	40%	40%	50%	43%	48%	54%	34%
Skin that looks thin	38%	22%	65%	46%	100%	38%	39%	24%	44%	69%	32%
Scalp blistering and hair loss (scarring alopecia)	22%	11%	39%	62%	0%	17%	31%	10%	24%	64%	11%
Skin cancer	8%	3%	16%	15%	20%	10%	5%	10%	8%	21%	1%
Poor wound healing symptoms	77%	70%	90%	92%	80%	77%	79%	65%	81%	92%	79%
Wounds that heal very slowly	63%	53%	79%	85%	80%	61%	67%	52%	64%	87%	61%
Infected wounds	55%	49%	69%	77%	20%	53%	61%	34%	58%	79%	62%
Leakage or discharge from wounds	53%	44%	73%	62%	0%	51%	57%	39%	58%	85%	46%
Smell or odour from wounds	41%	30%	66%	46%	0%	36%	50%	22%	41%	87%	39%

Base 318 (215 Patients, 103 Carers)

Q13 Which of the following symptoms of EB have you / the person you care(d) for have you ever experienced?

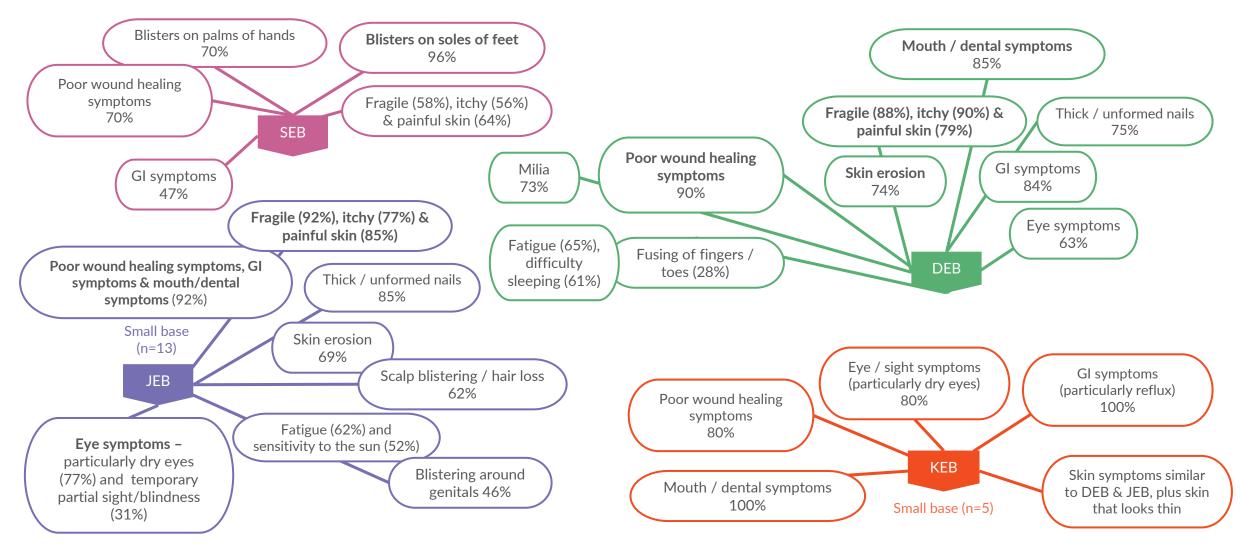
SEB patients are less likely than other EB types to experience mouth/dental, eye, and GI symptoms

% EB patients who have experienced each symptom	Total	055	FB Ty	/pe			ent Type			erity	
		SEB	DEB	JEB	KEB	Patient	Carer	Mild	Moderate	Severe	It depends
Base	N=318	N=193	N=97	N= 13	N=5 100%	N=215	N=103	N=83	N=108	N=39	N=85
Mouth / dental symptoms	57%	40%	85%	92%		53%	63%	40%	65%	90%	48%
Blisters inside the mouth and throat	48%	30%	78%	69%	100%	44%	56%	29%	56%	79%	41%
Dental problems, such as tooth decay or teeth falling out	33%	19%	55%	69%	100%	31%	37%	17%	37%	69%	27%
Difficulty swallowing (dysphagia)	25%	6%	59%	38%	80%	21%	31%	7%	31%	64%	15%
Blisters constricting or narrowing food pipe (oesophagus)	19%	1%	53%	31%	80%	14%	29%	4%	20%	62%	12%
Webbing in the throat	13%	1%	33%	15%	80%	10%	17%	1%	16%	33%	9%
Eye / sight symptoms	39%	23%	63%	77%	80%	35%	48%	22%	46%	62%	36%
Dry eyes	34%	18%	56%	77%	80%	32%	38%	20%	40%	54%	29%
Blistering and/or irritation in or around the eyes	22%	9%	42%	54%	40%	19%	29%	7%	25%	51%	19%
Temporary partial sight or blindnes	7%	1%	14%	31%	20%	6%	9%	1%	7%	21%	4%
Permanent partial sight or blindness	2%	1%	5%	8%	0%	0%	7%	0%	1%	8%	2%
GI symptoms	61%	47%	84%	92%	100%	55%	72%	39%	69%	85%	62%
Painful passing of stools (poo)	34%	18%	60%	69%	60%	27%	48%	19%	37%	69%	27%
Constipation	33%	20%	55%	62%	60%	25%	50%	14%	36%	64%	33%
Anal fissures - sores, tears or ulcers near the anus / back passage	32%	21%	54%	62%	20%	33%	31%	24%	38%	51%	25%
Reflux	29%	19%	41%	69%	100%	27%	34%	14%	34%	49%	28%
Blistering in or around the genitals	27%	23%	31%	46%	40%	23%	35%	13%	24%	56%	29%
Fecal impaction	16%	9%	28%	23%	60%	14%	20%	8%	19%	28%	14%
Fatigue	46%	35%	65%	62%	20%	45%	48%	29%	50%	74%	45%
Difficulty sleeping	43%	35%	61%	46%	20%	41%	46%	25%	47%	72%	41%
Sensitivity to the sun	33%	26%	41%	54%	100%	31%	38%	22%	38%	46%	32%
Chills	13%	7%	22%	23%	40%	12%	15%	4%	18%	26%	8%
Fever	12%	8%	19%	31%	0%	8%	18%	4%	13%	31%	8%
Fingers or toes fusing together	10%	2%	28%	15%	0%	6%	20%	4%	6%	46%	5%
Problems with the bladder / passing urine e.g., urethral stricture	8%	7%	7%	31%	40%	9%	8%	5%	14%	10%	4%
Breathing difficulty	7%	4%	12%	31%	0%	7%	8%	2%	8%	15%	6%

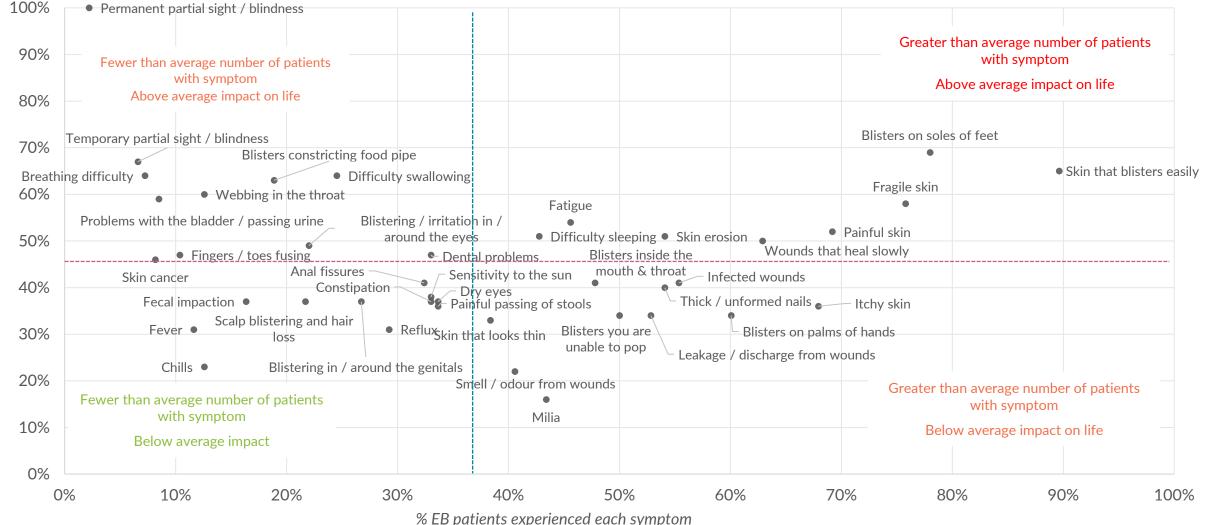
Different EB types are characterised by the presence and impact of certain symptoms – but symptoms can also vary significantly within each EB type

Carers

Patients



Skin that blisters easily, blisters on soles of feet and fragile skin have both a higher than average incidence and impact on daily life



Base Patients & Carers (excluding past carers of patients under 2); Base for each symptom variable Q14A For each of the symptoms you / the person you care(d) for have experienced, please tell us: How much impact they have had on your / their daily life? Q14c Please tell us how much impact EB has / had on each of these aspects of your / their daily life.

30

Blisters on soles of the feet are more likely to high impact on SEB patients' lives, whereas fragile skin, itchy skin, skin erosion and skin cancer are more likely to highly impact DEB patient's lives Generally greater severity correlates with greater impact of symptoms (1/2)

Patients Carers

% EB patients within each group with each symptom	-	ЕВ Туре				Respond	lent Type	Severity			
that rated it 'High Impact'	Total	SEB	DEB	JEB	KEB	Patient	Carer	Mild	Moderate	Severe	It depends
Base (variable for each row)				Small base	Small base						
Skin that blisters easily	65%	68%	63%	70%	33%	60%	76%	37%	69%	94%	74%
Blisters on the soles of the feet	69%	73%	52%	100%	100%	64%	79%	41%	68%	88%	85%
Fragile skin	58%	47%	71%	80%	60%	53%	69%	30%	59%	91%	59%
Painful skin	52%	51%	56%	78%	25%	47%	64%	19%	48%	81%	66%
ltchy skin	36%	24%	50%	22%	60%	32%	45%	17%	35%	65%	35%
Blisters on the palms of the hands	34%	31%	42%	60%	0%	29%	46%	13%	37%	65%	32%
Nails that are thick or unformed	40%	33%	44%	89%	60%	37%	46%	19%	42%	52%	54%
Skin erosion / breakdown of outer layer of skin	51%	41%	64%	43%	50%	45%	61%	20%	48%	77%	62%
Blisters that you are unable to pop	34%	40%	17%	33%	33%	37%	29%	21%	34%	28%	44%
Tiny pimple-like bumps (milia)	16%	14%	20%	0%	0%	17%	14%	6%	25%	20%	10%
Skin that looks thin	33%	26%	32%	60%	60%	29%	40%	15%	23%	60%	33%
Scalp blistering and hair loss (scarring alopecia)	37%	29%	38%	57%	0%	35%	40%	0%	31%	48%	56%
Skin cancer	46%	0%	63%	100%	0%	38%	80%	25%	44%	75%	0%
Wounds that heal very slowly	50%	41%	58%	78%	25%	47%	55%	30%	51%	78%	46%
Infected wounds	41%	38%	46%	56%	0%	38%	48%	14%	36%	60%	53%
Leakage or discharge from wounds	34%	25%	44%	67%	0%	31%	39%	13%	25%	60%	46%
Smell or odour from wounds	22%	18%	29%	0%	0%	21%	25%	11%	14%	32%	30%

Base Patients & Carers (excluding past carers of patients under 2); Base for each symptom variable

Q14A For each of the symptoms you / the person you care(d) for have experienced, please tell us: How much impact they have had on your / their daily life? Q14B How frequently the symptom affects you / them?

Generally greater severity correlates with greater impact of symptoms (2/2)

% EB patients within each group with each symptom	ЕВ Туре					Respond	ent Type	Severity			
that rated it 'High Impact'	Total	SEB	DEB	JEB	KEB	Patient	Carer	Mild	Moderate	Severe	It depends
Base variable for each row				Small base	Small base						
Blisters inside the mouth and throat	41%	28%	51%	29%	40%	44%	35%	13%	41%	46%	51%
Dental problems, such as tooth decay or teeth falling out	47%	50%	50%	22%	60%	43%	54%	29%	40%	58%	57%
Difficulty swallowing (dysphagia)	64%	55%	66%	67%	75%	63%	66%	33%	64%	59%	85%
Blisters constricting or narrowing food pipe (oesophagus)	63%	100%	64%	100%	25%	57%	69%	33%	57%	67%	70%
Webbing in the throat	60%	0%	66%	100%	25%	59%	61%	0%	59%	62%	63%
Dry eyes	37%	24%	40%	78%	50%	35%	41%	0%	33%	68%	44%
Blistering and/or irritation in or around the eyes	49%	39%	56%	67%	0%	53%	45%	17%	44%	58%	56%
Temporary partial sight or blindnes	67%	50%	64%	75%	100%	58%	78%	100%	75%	50%	67%
Permanent partial sight or blindness	100%	100%	100%	100%	0%	0%	100%	0%	100%	100%	100%
Painful passing of stools (poo)	41%	43%	38%	71%	0%	38%	48%	25%	41%	53%	43%
Constipation	36%	26%	39%	63%	33%	36%	36%	44%	33%	40%	30%
Anal fissures - sores, tears or ulcers near the anus / back passage	37%	18%	46%	71%	33%	40%	34%	50%	31%	43%	32%
Reflux	31%	19%	36%	50%	40%	24%	42%	17%	32%	41%	25%
Blistering in or around the genitals	37%	41%	38%	20%	0%	41%	32%	36%	38%	35%	36%
Fecal impaction	37%	12%	58%	33%	33%	29%	50%	57%	33%	30%	33%
Fatigue	54%	48%	65%	29%	100%	54%	53%	42%	52%	70%	53%
Difficulty sleeping	51%	45%	58%	67%	0%	52%	49%	38%	55%	50%	51%
Sensitivity to the sun	38%	38%	36%	29%	60%	44%	26%	17%	41%	35%	44%
Chills	23%	14%	33%	0%	0%	24%	20%	0%	26%	10%	43%
Fever	31%	20%	44%	0%	0%	22%	39%	33%	21%	27%	43%
Fingers or toes fusing together	47%	0%	54%	50%	0%	50%	45%	0%	33%	59%	25%
Problems with the bladder / passing urine e.g., urethral stricture	59%	62%	57%	50%	100%	68%	38%	75%	60%	25%	67%
Breathing difficulty	48%	43%	50%	50%	0%	40%	67%	50%	44%	25%	60%

Base Patients & Carers (excluding past carers of patients under 2); Base for each symptom variable

Q14A For each of the symptoms you / the person you care(d) for have experienced, please tell us: How much impact they have had on your / their daily life? Q14B How frequently the symptom affects you / them?

EB Symptom frequency & triggers

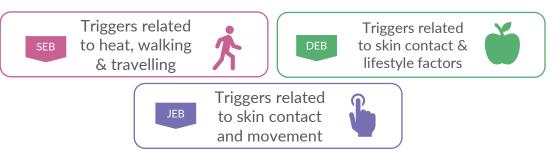
Some symptoms are more likely to occur seasonally...

Blisters on soles of feet Blisters you are unable to pop Sensitivity to sun Some are more likely to occur frequently, or every day... Dry eyes Fatigue Bladder problems Slow healing wounds Blisters in mouth and throat And some occur only intermittently, or rarely... Infected wounds Dental problems Scalp blistering Reflux Fever

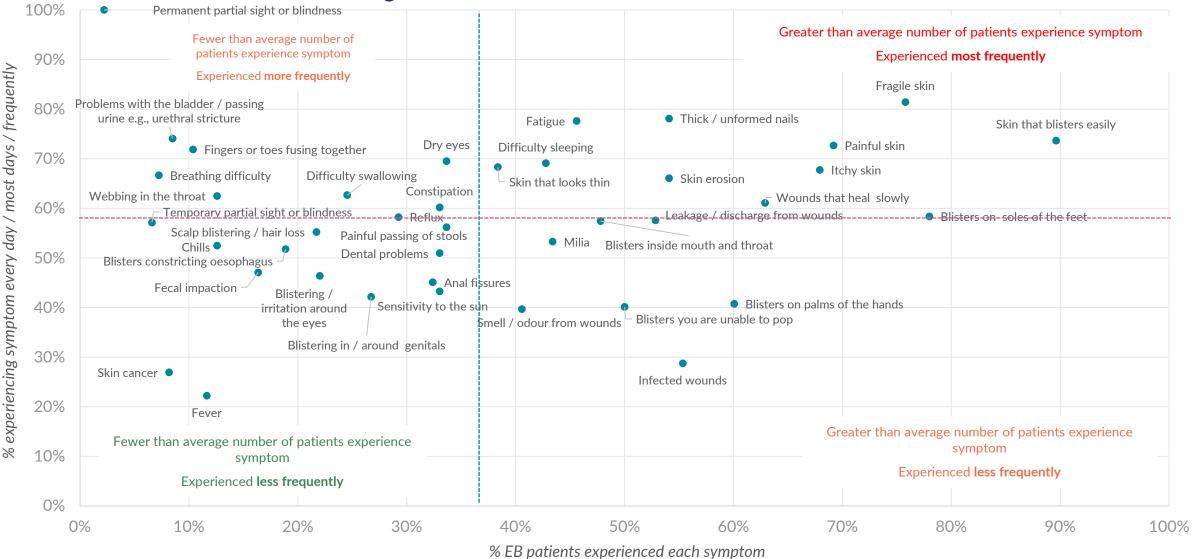
EB symptoms can be triggered by...



In addition to physical exertion (51%), removal of stuck bandages / clothes (50%), rough / poorly fitting clothes (44%)



The symptoms that impact the most patients and are experienced every day / most days, include skin that blisters easily, is fragile, painful or itchy frequently or daily, in addition to skin erosion & thick/unformed nails and fatigue

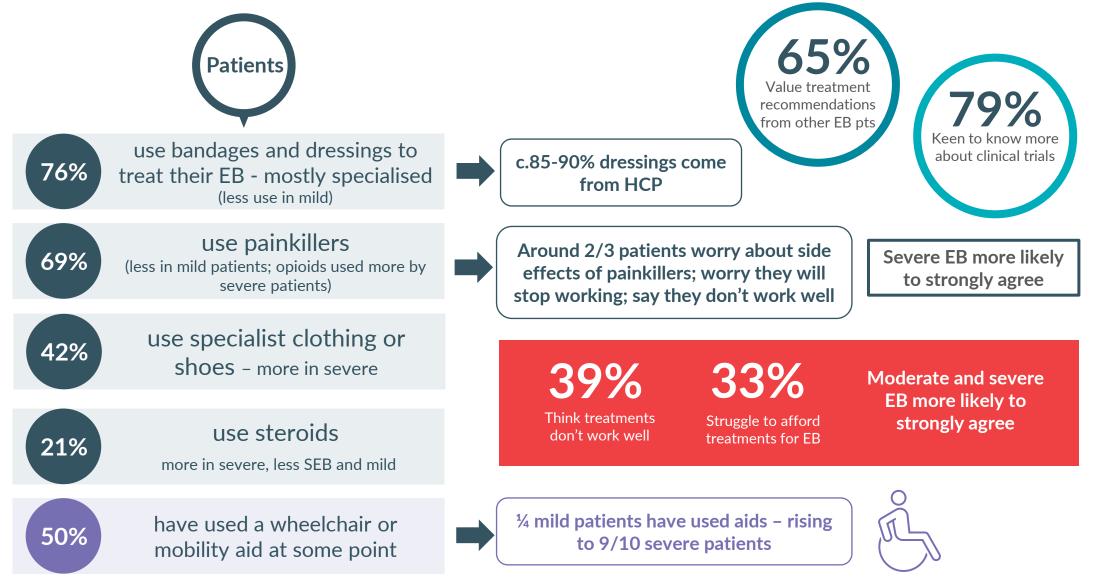


Base Patients & Carers (excluding past carers of patients under 2); Base for each symptom variable Q14A For each of the symptoms you / the person you care(d) for have experienced, please tell us: How much impact they have had on your / their

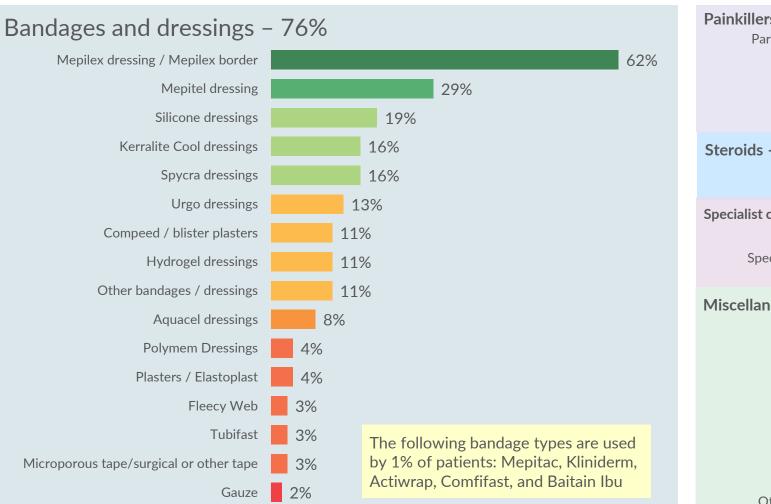
daily life? Q14B How frequently the symptom affects you / them?

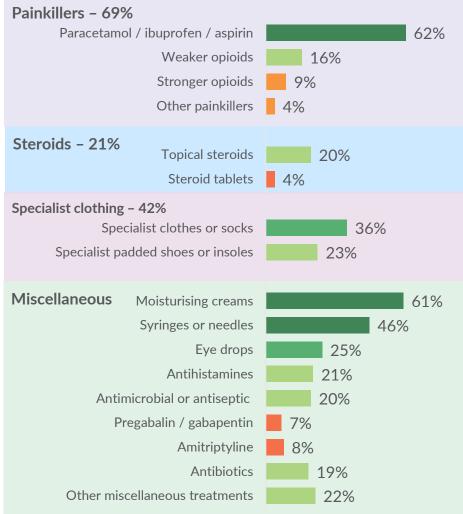
Treatments

Most EB patients use specialised bandages (from HCP); widespread painkiller use (and concerns about this); severe patients think current treatments don't work; widespread use of mobility aids Patients Carers



C. Two thirds of EB patients use Mepilex dressings, OTC painkillers and moisturising creams to manage symptoms; just under half use syringes or needles, a third use specialist clothing or socks





Base 318 (215 Patients and 103 carers)

Q19 Which of the following medicines or therapies do you currently take or use to help manage your EB symptoms?

C. Two thirds of EB patients use Mepilex dressings, OTC painkillers and moisturising creams to manage symptoms; just under half use syringes or needles, a third use specialist clothing or socks and a quarter use eye drops; other treatments and medications are only used by a minority, evidencing lack of standard of care treatment

Patients Carers

	—		EB T	уре		Respond	lent Type		Severity				
% Patients and carers selecting options	Total	SEB	DEB	JEB	KEB	Patient	Carer	Mild	Moderate	Severe	It depends		
N=	318	193	97	13	5	83	108	39	85	103	215		
Pain Killers [NET]	69%	69%	72%	69%	80%	65%	79%	46%	70%	85%	84%		
Paracetamol / ibuprofen / aspirin	62%	63%	63%	69%	80%	43%	61%	72%	78%	74%	57%		
Weaker opioids	16%	17%	16%	15%	0%	5%	15%	28%	22%	12%	18%		
Stronger opioids e.g. morphine / hydrocodone	9%	4%	19%	38%	0%	0%	6%	41%	7%	23%	3%		
Other painkillers	4%	3%	7%	0%	0%	0%	5%	13%	4%	6%	3%		
Bandages, wound dressing, and plasters {NET}	76%	70%	89%	77%	80%	73%	83%	58%	81%	79%	86%		
Mepilex dressing / Mepilex border	62%	53%	78%	69%	80%	55%	75%	41%	65%	69%	74%		
Mepitel dressing	29%	19%	49%	46%	20%	21%	46%	8%	31%	56%	33%		
Silicone dressings	19%	17%	22%	31%	40%	16%	26%	12%	19%	36%	20%		
Kerralite Cool dressings	16%	20%	10%	15%	20%	16%	17%	13%	17%	5%	25%		
Spycra dressings	16%	19%	12%	8%	0%	12%	25%	6%	20%	15%	21%		
Urgo dressings	13%	8%	20%	46%	0%	7%	25%	5%	16%	31%	8%		
Compeed / blister plasters	11%	14%	6%	0%	0%	13%	8%	17%	7%	5%	13%		
Hydrogel dressings	11%	11%	10%	15%	0%	9%	15%	7%	9%	15%	14%		
Aquacel dressings	8%	5%	12%	15%	20%	4%	16%	0%	7%	18%	11%		
Other bandages / dressings	7%	7%	5%	8%	0%	9%	1%	11%	3%	0%	11%		
Nothing / no treatments / medicines / therapies	6%	6%	6%	8%	0%	8%	2%	14%	5%	3%	2%		
Other bandages / dressings / plasters	4%	5%	4%	0%	0%	4%	5%	4%	6%	3%	5%		
Polymem Dressings	4%	2%	7%	15%	0%	2%	8%	1%	6%	13%	0%		
Plasters / Elastoplast	4%	6%	1%	8%	0%	6%	1%	10%	5%	0%	1%		
Steroids [NET]	21%	10%	38%	38%	60%	17%	30%	6%	24%	44%	30%		
Steroid tablets	4%	1%	8%	23%	0%	3%	6%	0%	6%	13%	0%		
Steroid cream applied on your skin	20%	10%	34%	38%	60%	16%	28%	6%	20%	44%	20%		

Base 318 (215 Patients and 103 carers)

N.B. caution interpreting percentages with a low base

Q19 Which of the following medicines or therapies do you currently take or use to help manage your EB symptoms?

C. Two thirds of EB patients use Mepilex dressings, OTC painkillers and moisturising creams to manage symptoms; just under half use syringes or needles, a third use specialist clothing or socks and a quarter use eye drops; other treatments and medications are only used by a minority, evidencing lack of standard of care treatment

			EB Ty	pe		Respond	ent Type	Severity				
% Patients and carers selecting options	Total	SEB	DEB	JEB	KEB	Patient	Carer	Mild	Moderate	Severe	It depends	
N=	318	193	97	13	5	83	108	39	85	103	215	
Specialist clothing / shoes [NET}	42%	46%	35%	62%	40%	35%	56%	24%	46%	51%	51%	
Specialist clothes or socks	36%	41%	27%	54%	40%	27%	54%	23%	35%	49%	46%	
Specialist padded shoes or insoles	23%	25%	20%	31%	40%	20%	29%	10%	26%	26%	33%	
Moisturising creams / gels	61%	52%	77%	77%	80%	53%	77%	46%	64%	77%	65%	
Syringes or needles	46%	43%	51%	77%	40%	36%	65%	30%	47%	62%	52%	
Eye drops	25%	12%	43%	77%	80%	21%	34%	12%	30%	44%	24%	
Other miscellaneous treatments	22%	17%	28%	38%	60%	15%	36%	13%	22%	36%	22%	
Antihistamines	21%	16%	30%	46%	20%	14%	37%	12%	20%	46%	20%	
Antimicrobial or antiseptic treatments	20%	20%	23%	23%	20%	18%	25%	13%	14%	44%	24%	
Antibiotics	19%	15%	28%	31%	40%	13%	32%	5%	19%	51%	20%	
Amitriptyline	8%	7%	11%	8%	0%	7%	10%	1%	11%	18%	6%	
Pregabalin / gabapentin	7%	3%	13%	15%	20%	11%	5%	0%	5%	26%	6%	

N.B. caution interpreting percentages with a low base

Patients Carers

Base 318 (215 Patients and 103 carers)

Q19 Which of the following medicines or therapies do you currently take or use to help manage your EB symptoms?

Patients Carers

EB and mental health

MH issues are widespread and support is not always offered to those who need it; poor coping strategies evident Only

Symptoms that have widest impact on MH (that is, affect the most people and have an above-average impact on MH): Blisters on the feet Skin that blisters easily Fatigue Painful skin Slowly healing wounds Itchy skin Thick / unformed nails

Symptoms that also have a large impact on MH (but affect fewer people) Skin cancer (although, rare) Partial sight / blindness Fingers / toes fusing Bladder problems Scalp blistering and hair loss Dental problems



Severe patients rely on escapism, whereas mild patients try to keep active

Carers

Patients

support

with it

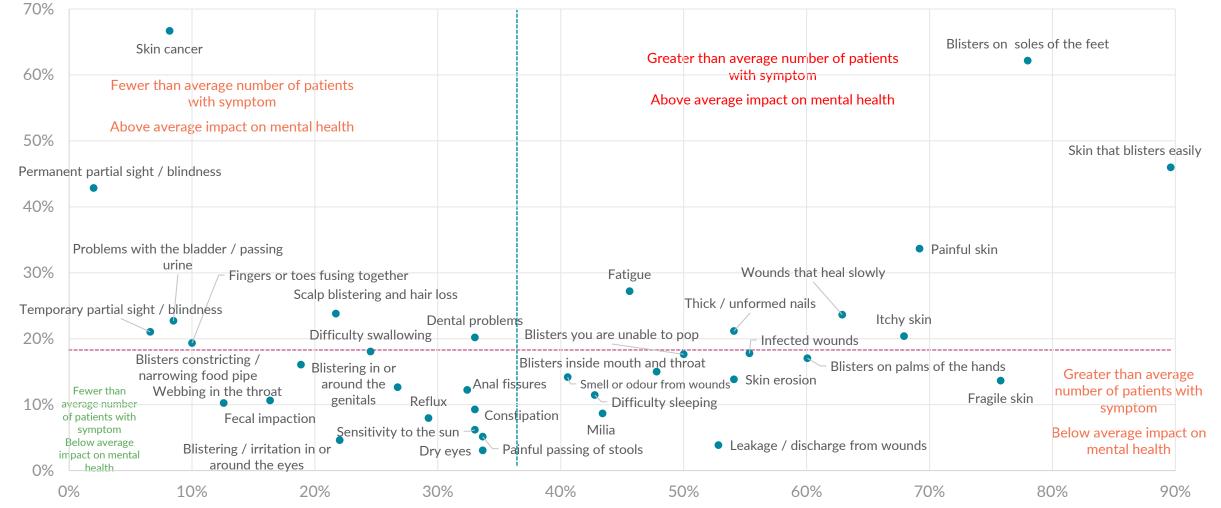
activity

Keep in mind

'it could be worse'

particularly mild and moderate patients

Symptoms that many patients have, such as skin that blisters easily and blisters on soles of feet, are highly impactful on mental health



Symptoms that 0% ranked in top 3 not shown here

% EB patients who have experienced symptom

Base 291 patients/carers reporting symptoms who did not skip the question

Q24 Which symptoms have the greatest impact on your mental health? Please rate the top three that have the most impact on your mental health, selecting the most impactful first.

Large variations in how frequently symptoms present across EB types – severe patients more likely to have more frequent symptoms (1/2)

Patients Carers

% EB patients with each symptom who have experienced			EB 1	Гуре		Respond	ent Type	Severity				
each symptom every day / most days / frequently	Total	SEB	DEB	JEB	KEB	Patient	Carer	Mild	Moderate	Severe	It depends	
Base variable for each row												
Permanent partial sight or blindness	100%	100%	100%	100%	0%	0%	100%	0%	100%	100%	100%	
Fragile skin	81%	71%	94%	90%	100%	79%	86%	71%	84%	100%	75%	
Nails that are thick or unformed	78%	75%	79%	100%	100%	76%	81%	71%	79%	76%	87%	
Fatigue	78%	69%	84%	100%	100%	78%	77%	67%	78%	96%	71%	
Skin that blisters easily	74%	67%	86%	90%	67%	67%	88%	51%	79%	97%	76%	
Problems with the bladder / passing urine e.g., urethral stricture	74%	77%	71%	50%	100%	90%	38%	100%	80%	25%	67%	
Painful skin	73%	63%	85%	100%	100%	66%	85%	33%	77%	94%	85%	
Fingers or toes fusing together	72%	0%	81%	100%	0%	58%	80%	33%	50%	94%	25%	
Dry eyes	70%	62%	66%	100%	100%	75%	60%	59%	72%	74%	68%	
Difficulty sleeping	69%	63%	73%	100%	100%	67%	72%	52%	69%	79%	71%	
Itchy skin	68%	57%	79%	89%	80%	64%	75%	50%	70%	90%	65%	
Skin that looks thin	68%	58%	74%	60%	80%	66%	74%	50%	70%	80%	67%	
Breathing difficulty	67%	43%	83%	50%	0%	67%	67%	0%	67%	75%	80%	
Skin erosion / breakdown of outer layer of skin	66%	48%	86%	86%	100%	57%	83%	34%	63%	97%	74%	
Difficulty swallowing (dysphagia)	63%	55%	63%	100%	75%	57%	72%	33%	52%	77%	77%	
Webbing in the throat	63%	50%	63%	100%	50%	64%	61%	0%	65%	77%	38%	
Wounds that heal very slowly	61%	50%	70%	100%	25%	57%	69%	42%	58%	97%	58%	
Constipation	60%	47%	64%	86%	100%	57%	64%	75%	46%	78%	57%	

Base Patients & Carers (excluding past carers of patients under 2); Base for each symptom variable

Q14A For each of the symptoms you / the person you care(d) for have experienced, please tell us: How much impact they have had on your / their daily life? Q14B How frequently the symptom affects you / them?

Large variations in how frequently symptoms present across EB types – severe patients more likely to have more frequent symptoms (2/2)

Patients Carers

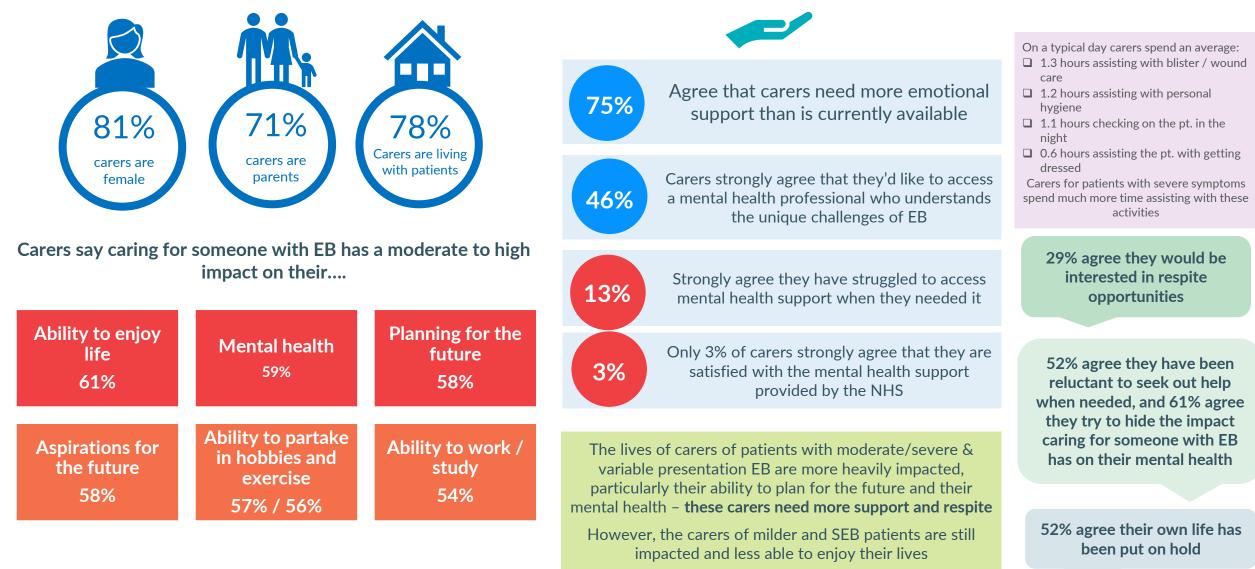
% EB patients with each symptom who have experienced	Tabl		EB 1	Гуре		Respond	ent Type	Severity				
each symptom every day / most days / frequently	Total	SEB	DEB	JEB	KEB	Patient	Carer	Mild	Moderate	Severe	It depends	
Base variable for each row												
Blisters on the soles of the feet	58%	58%	56%	100%	100%	53%	72%	41%	59%	92%	60%	
Leakage or discharge from wounds	58%	41%	77%	100%	0%	51%	71%	41%	52%	93%	51%	
Reflux	58%	47%	56%	88%	100%	60%	55%	58%	57%	59%	58%	
Blisters inside the mouth and throat	57%	35%	68%	86%	100%	58%	56%	48%	53%	82%	51%	
Temporary partial sight or blindnes	57%	50%	57%	50%	100%	50%	67%	100%	63%	50%	33%	
Painful passing of stools (poo)	56%	59%	54%	63%	67%	48%	66%	56%	50%	60%	61%	
Scalp blistering and hair loss (scarring alopecia)	55%	29%	65%	71%	0%	54%	57%	25%	54%	70%	44%	
Tiny pimple-like bumps (milia)	53%	48%	54%	100%	50%	59%	44%	47%	56%	60%	52%	
Chills	53%	43%	62%	33%	50%	60%	40%	0%	47%	60%	71%	
Blisters constricting or narrowing food pipe (oesophagus)	52%	0%	54%	100%	25%	47%	58%	0%	57%	67%	20%	
Dental problems,	51%	47%	44%	67%	100%	49%	54%	43%	53%	58%	44%	
Fecal impaction	47%	29%	58%	67%	67%	39%	60%	43%	33%	70%	50%	
Blistering and/or irritation in or around the eyes	46%	39%	46%	67%	100%	50%	41%	33%	56%	53%	25%	
Anal fissures - sores, tears or ulcers near the anus	45%	28%	56%	57%	0%	45%	45%	40%	44%	58%	38%	
Sensitivity to the sun	43%	36%	46%	71%	60%	35%	58%	17%	49%	59%	41%	
Blistering in or around the genitals	42%	41%	45%	40%	50%	41%	44%	27%	31%	55%	48%	
Blisters on the palms of the hands	41%	36%	49%	100%	100%	30%	64%	10%	47%	83%	38%	
Blisters that you are unable to pop	40%	38%	43%	50%	67%	36%	50%	9%	43%	72%	44%	
Smell or odour from wounds	40%	30%	46%	100%	0%	28%	58%	11%	27%	74%	39%	
Infected wounds	29%	19%	39%	67%	0%	27%	32%	4%	27%	57%	28%	
Skin cancer	27%	0%	31%	100%	0%	10%	100%	0%	11%	75%	0%	
Fever	22%	13%	22%	67%	0%	28%	17%	0%	14%	36%	14%	

Base Patients & Carers (excluding past carers of patients under 2); Base for each symptom variable

Q14A For each of the symptoms you / the person you care(d) for have experienced, please tell us: How much impact they have had on your / their daily life? Q14B How frequently the symptom affects you / them?

Carers for people with EB

Carers for EB patients experience strain on their mental health and are often unable to access appropriate support



Patients Carers

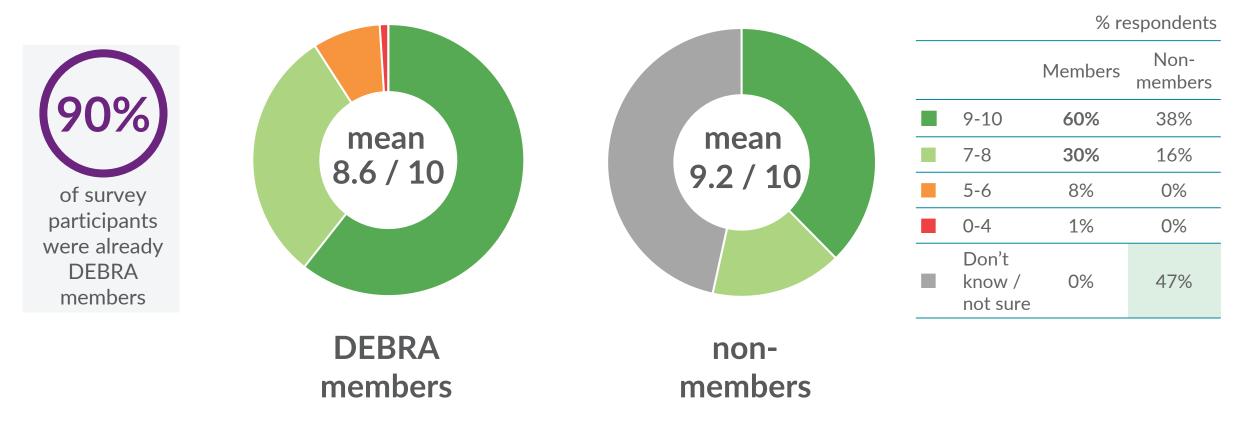
Attitudes to DEBRA

The majority of EB patients and carers have positive perceptions of DEBRA's performance; 90% members score DEBRA 7+/10

Carers

Patients

If you had to give DEBRA UK a score from 0-10 for how well they are doing, where 0 = very poor and 10 = extremely well, what score would you give them?



Base 318 (215 patients and 103 carers)

Q41 Are you a member of DEBRA?

Q42 If you had to give DEBRA UK a score from 0-10 for how well they are doing, where 0 = very poor and 10 = extremely well, what score would you give them?

Fewer patients with mild symptoms of EB are DEBRA members than patients with moderate to severe or variable symptom presentation

% Patients and carers who are a member of DEBRA	Total	i	EB Ty	ре		Respond	ent Type	Severity				
		SEB	DEB	JEB	KEB	Patient	Carer	Mild	Moderate	Severe	It depends	
N=	318	193	97	13	5	215	103	83	108	39	85	
Yes	90%	89%	93%	100%	100%	89%	92%	80%	93%	95%	94%	
Νο	10%	11%	7%	0%	0%	11%	8%	20%	7%	5%	6%	

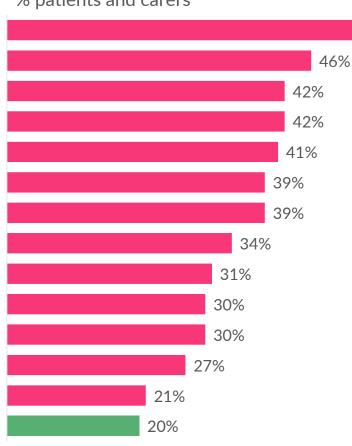
			EB Ty	'pe		Respond	ent Type	Severity				
Mean DEBRA rating (Q42)	Total	SEB	DEB	JEB	KEB	Patient	Carer	Mild	Moderate	Severe	It depends	
N=	318	193	97	13	5	215	103	83	108	39	85	
Mean	8.7	8.8	8.4	8.6	9.0	8.7	8.6	8.8	8.6	8.4	8.7	

N.B. caution interpreting percentages with a low base

Patients Carers

EB patients and carers would most like to see DEBRA funding research towards treatments and campaigning and lobbying to raise awareness of EB and improve NHS care

What activities or services would you like DEBRA UK to provide? (prompted, multicode)



% patients and carers

Funding for medical research towards treatments for EB Campaigning and lobbying to raise awareness of EB and for improvements in NHS care Grants to buy items / equipment and fund transport to medical appointments etc Support to access specialist healthcare professionals Information / education e.g. designed for each specific type of EB Community support e.g. home visits, annual or bi-annual check in calls Access to a counselling service or helpline that has knowledge about EB Local in-person events spread around the country Information on less talked about aspects of EB (relationships, sex, and fertility) Opportunities to meet and talk with others in similar situations Provision of respite breaks e.g. holiday homes and supported member weekends Online members forum / chat room Opportunities to get involved in fundraising and volunteering Nothing - I believe DEBRA already offer everything they can

> Base 318 (215 patients and 103 carers) Q43 What activities or services would you like DEBRA UK to provide?

Whilst all are positive towards funding research and campaigning, mod/severe/JEB want grants & community support

53%

DEB, ethnic minorities, teenagers and young adults would most like to see access to counselling

Carers of babies most satisfied with current support overall, less so for carers with children – who want to see provision of respite breaks & online forum

Children and younger adults more likely to want in-person events around the country, and info on sex / fertility

Females less positive towards funding and campaigning

DEBRA non-members would like to see similar provision as members, expect being less likely to want campaigning / lobbying (28%), access to counselling service (28%), provision of respite breaks (16%) Moderate & severe patients/carers more likely to want to see DEBRA provide community support; Severe and JEB particularly positive towards DEBRA funding medical research, campaigning to raise awareness, opportunitie to meet others and provision of respite breaks; mild & SEB least likely to want grants; JEB most likely to want supported access to specialist HCPs; DEB & severe most likely to want to see counselling service / helpline

% Definite and some cale sting outing	Tatal		EB Ty	ype		Respond	lent Type	Severity				
% Patients and carers selecting option	Total	SEB	DEB	JEB	KEB	Patient	Carer	Mild	Moderate	Severe	It depends	
Total	318	193	97	13	5	215	103	83	108	39	85	
Funding for medical research towards treatments for EB	53%	47%	60%	69%	60%	49%	60%	49%	56%	69%	45%	
Campaigning and lobbying to raise awareness of EB and for improvements in NHS care for people with EB	46%	41%	55%	62%	20%	44%	50%	41%	47%	59%	45%	
Grants to buy items / equipment (e.g. specialist clothing, wheelchairs) and fund transport to medical appointments etc	42%	38%	47%	62%	60%	37%	51%	31%	51%	56%	35%	
Support to access specialist healthcare professionals e.g. occupational therapy, podiatry, physiotherapy	42%	40%	43%	54%	40%	42%	41%	40%	49%	41%	35%	
Information / education e.g. designed for each specific type of EB, educational videos about EB	41%	42%	38%	46%	20%	40%	41%	42%	40%	44%	39%	
Community support e.g. home visits, annual or bi-annual check in calls from DEBRA support team, mentoring for families who have children with EB	39%	31%	49%	54%	80%	37%	43%	33%	47%	51%	29%	
Access to a counselling service or helpline that has knowledge about EB	39%	32%	52%	38%	40%	38%	40%	34%	41%	56%	34%	
Local in-person events spread around the country	34%	32%	38%	31%	20%	30%	41%	28%	37%	33%	35%	
Information on less talked about aspects of EB (relationships, sex, and fertility)	31%	29%	34%	31%	20%	32%	29%	34%	33%	28%	28%	
Opportunities to meet and talk with others in similar situations e.g. online group meetings for people with EB / carers via Zoom, in person meet ups for people with EB / their carers	30%	27%	34%	46%	60%	27%	36%	24%	35%	46%	21%	
Provision of respite breaks e.g. holiday homes and supported member weekends	30%	28%	33%	46%	20%	25%	41%	28%	33%	44%	22%	
Online members forum / chat room	27%	27%	26%	31%	40%	25%	33%	29%	31%	28%	21%	
Opportunities to get involved in fundraising and volunteering	21%	18%	27%	31%	40%	19%	25%	25%	23%	28%	12%	
Nothing - I believe DEBRA already offer everything they can	20%	22%	19%	15%	0%	23%	15%	27%	15%	13%	24%	
None of the above	1%	2%	0%	0%	0%	1%	2%	1%	0%	0%	4%	

Base 318 (215 patients and 103 carers)

Q43 What activities or services would you like DEBRA UK to provide?

N.B. caution interpreting percentages with a low base

Only 5% of carers for children feel DEBRA offers everything they can compared to 40% of carers for babies; teenagers, younger adults and those of an ethnic minority would like access to a counselling service

Patients Carers

			care of t centre?				nt Age			Patient	Gender	Patient	ethnicity		Location	
% Patients and carers selecting option	Total	Yes	No / not sure	Baby / toddler	Child	Teenager / young person		Adult 41-60	Adult 61+	Male	Female	White	Ethnic minority	North England	East & Midlands	South England
N=	318	193	125	20	38	23	93	79	65	108	201	292	24	46	81	126
Funding for medical research towards treatments for EB	53%	56%	47%	35%	63%	61%	60%	41%	52%	64%	47%	52%	58%	61%	47%	57%
Campaigning and lobbying to raise awareness of EB and for improvements in NHS care for people with EB	46%	48%	42%	30%	42%	48%	54%	41%	48%	56%	41%	47%	29%	52%	48%	50%
Grants to buy items / equipment and fund transport to medical appointments etc	42%	46%	35%	30%	50%	65%	48%	34%	32%	44%	42%	40%	58%	43%	42%	46%
Support to access specialist healthcare professionals e.g. occupational therapy, podiatry, physiotherapy	42%	42%	40%	20%	39%	43%	48%	35%	46%	45%	40%	43%	25%	33%	32%	52%
Information / education e.g. designed for each specific type of EB, educational videos about EB	41%	42%	38%	30%	45%	48%	46%	35%	37%	34%	44%	41%	33%	43%	35%	43%
Community support e.g. home visits, annual or bi-annual check in calls from DEBRA support team, mentoring for families who have children with EB	39%	42%	34%	35%	34%	57%	46%	33%	32%	43%	37%	38%	50%	37%	27%	44%
Access to a counselling service or helpline that has knowledge about EB	39%	41%	34%	30%	37%	52%	46%	33%	34%	41%	38%	37%	58%	41%	40%	40%
Local in-person events spread around the country	34%	35%	31%	20%	42%	39%	47%	20%	28%	31%	35%	35%	17%	35%	33%	32%
Information on less talked about aspects of EB (relationships, sex, and fertility)	31%	34%	27%	15%	24%	48%	48%	16%	28%	30%	32%	30%	42%	22%	30%	38%
Opportunities to meet and talk with others in similar situations	30%	36%	21%	35%	39%	39%	37%	19%	23%	34%	28%	29%	42%	28%	25%	37%
Provision of respite breaks	30%	32%	27%	25%	45%	48%	31%	23%	23%	32%	29%	30%	33%	28%	26%	35%
Online members forum / chat room	27%	28%	26%	20%	42%	22%	35%	19%	22%	29%	27%	27%	25%	30%	27%	26%
Opportunities to get involved in fundraising and volunteering	21%	22%	20%	15%	21%	35%	28%	13%	18%	25%	18%	22%	17%	22%	20%	25%
Nothing - I believe DEBRA already offer everything they can	20%	18%	25%	40%	5%	13%	15%	32%	20%	12%	24%	21%	13%	20%	20%	18%
None of the above	1%	2%	1%	0%	5%	0%	1%	1%	0%	0%	2%	1%	0%	0%	4%	0%

Base 318 (215 patients and 103 carers)

Q43 What activities or services would you like DEBRA UK to provide?

N.B. caution interpreting percentages with a low base

Overall EB patients and carers feel it is most important for funds to be spent on newly available drug treatments for EB, closely followed by a cure; improvement in diagnosis and referral seen as least important

Which of the following options do you believe is the most important to spend money on?

Mean Rank % patients and carers (n=318) Score (1-4)

Newly available drug treatments for EB (which may take 3-5 years to adapt from existing treatments for other conditions)

A cure for EB (may take 10 or more years to develop, but may never be achieved)

Improvement in health and social care and support provided for EB patients by the NHS and EB charities (which may take 1-2 years to achieve)



Improvement in diagnosis and referral for EB patients by the NHS (which may take 1-2 years to achieve)



Base All respondents (n=318)

Q39B Please think about your aspirations for EB in the future.

Imagine that you are in charge of funding decisions for EB – you get to decide what to spend money on. But, there are a limited amount of funds to go around; it is not possible to spend money on everything. Which of the following options do you believe is the most important to spend money on?

Carers Patients

JEB

For JEB, improvement in care, diagnosis and referral are much less important than a cure or new treatment development

$\mathbf{M}_{\mathbf{a},\mathbf{a},\mathbf{b}} = \mathbf{A} \cdot \mathbf{A} + \mathbf{A} + \mathbf{A} \cdot \mathbf{A} + \mathbf{A}$			EB Ty	ре		Respond	ent Type	Severity				
Mean (1st = 1, 4 th = 4)	Total	SEB	DEB	JEB	KEB	Patient	Carer	Mild	Moderate	Severe	It depends	
Total	318	193	97	13	5	215	103	83	108	39	85	
Newly available drug treatments for EB (which may take 3-5 years to adapt from existing treatments for other conditions)	2.1	2.1	2.1	1.9	3.2	2.2	1.9	2.2	2.2	1.9	2.1	
A cure for EB (may take 10 or more years to develop, but may never be achieved)	2.3	2.4	2.3	1.6	1.6	2.3	2.2	2.5	2.3	2.3	2.2	
Improvement in health and social care and support provided for EB patients by the NHS and EB charities (which may take 1-2 years to achieve)	2.6	2.6	2.5	3.1	2.2	2.5	2.8	2.4	2.6	2.6	2.6	
Improvement in diagnosis and referral for EB patients by the NHS (which may take 1-2 years to achieve)	3.0	2.9	3.1	3.4	3.0	2.9	3.1	2.9	3.0	3.2	3.1	

N.B. caution interpreting percentages with a low base

Patients Carers

Base All respondents (n=318)

Q39B Please think about your aspirations for EB in the future.

Imagine that you are in charge of funding decisions for EB – you get to decide what to spend money on. But, there are a limited amount of funds to go around; it is not possible to spend money on everything. Which of the following options do you believe is the most important to spend money on?

Conclusions and Recommendations

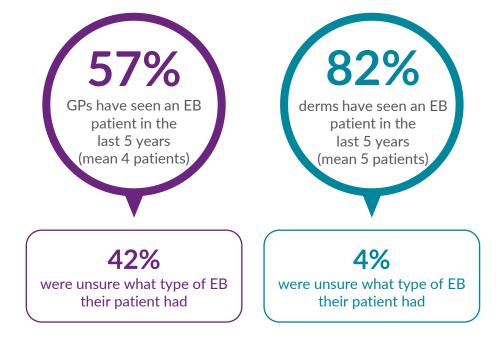
- EB has a high symptom burden, with many of the symptoms experienced by most patients having a high impact on daily life
- That being said, life with EB is highly variable the type of EB does not necessarily correlate with severity, and the worst days can be
 considerably worse than an average day beware of making assumptions about what patients are going through and what they are
 capable of at any one time
- Symptoms are again highly variable and cause significant impact on QoL the 'lows' of patients with variable or seasonal symptoms can feel particularly low, and they can struggle to be understood by HCPs
- Foot blistering is particularly impactful and may need to be an area of focus
- EB has a significant impact on mental health, and for carers and DEB patients in particular consider more carer focused solutions
- Teenagers and young adults with EB need more tailored support across the board potential gap resulting from service transition
- Difficulties with HCP interactions evidences need for HCP education (see next section)
- Effective symptom management, treatments or therapies severely lacking for EB all patients using something different or nothing at all, rely on recommendations from others
- Delayed presentation and referral are obstacles to timely diagnosis particularly for SEB and patients with seasonal symptoms
- A significant amount of EB patients are not under specialist care whilst some feel they don't need this, the remainder are coping on their own or potentially held in local primary / secondary care
- Even when under specialist care, access is difficult for some patients to achieve re travelling and frequency of appointments not tailored to patient needs
- Whilst many aspire towards a cure for EB, when time frames and limited funds are taken into account **the development of new treatments take priority**

55 **O** Synergy

GPs Derms

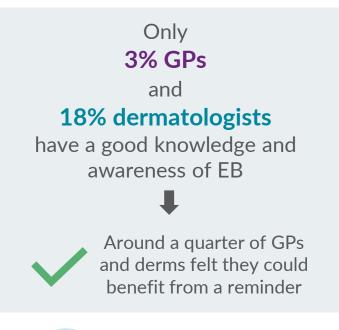
HCP Research Key Conclusions

There is a need to raise awareness and understanding of EB among GPs and dermatologists, despite many having seen an EB patient in the past





Over 2/3 of dermatologists suggest that awareness of EB in both primary care and general dermatology is too low





3/4 dermatologists feel EB is too rare to be familiar with

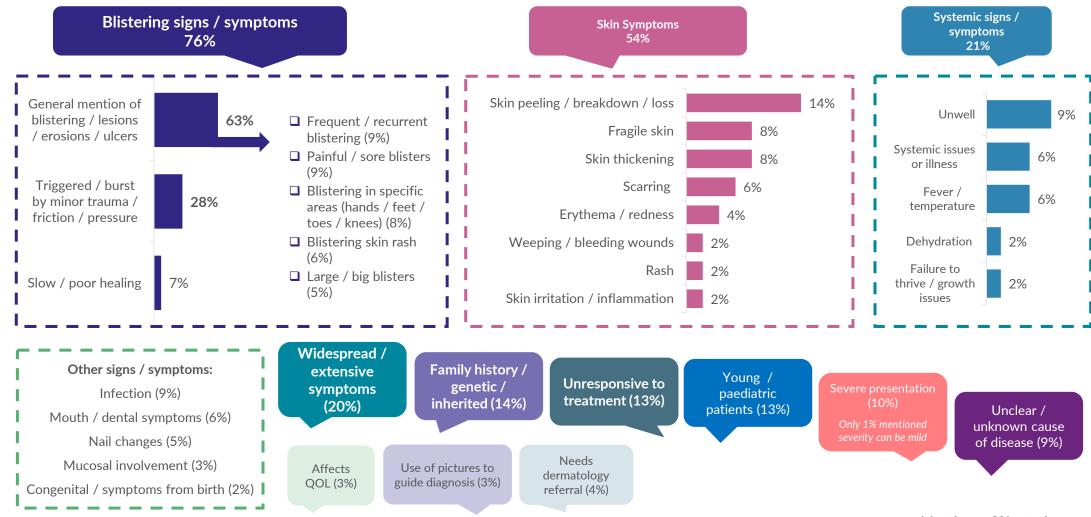
2/3 dermatologists are not sure they would recognise EB symptoms if they saw them GPs

Derms

GPs Derms

GP spontaneous awareness of signs and symptoms of EB

What signs or symptoms would suggest to you that a patient should be referred to diagnostic services or secondary care for investigation of possible EB / a possible diagnosis of EB? (free text, spontaneous) (2% = 2 GPs)



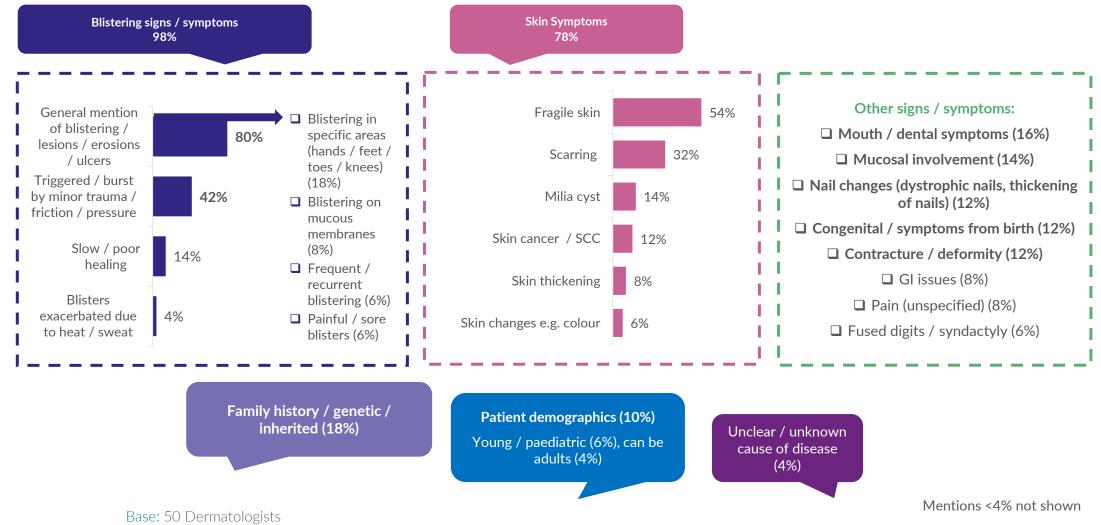
Base: 100 GPs

Mentions <2% not shown

Q1 What signs or symptoms would suggest to you that a patient should be referred to diagnostic services or secondary care for investigation of possible EB / a possible diagnosis of EB?

Dermatologist spontaneous awareness of signs and symptoms of EB

What signs or symptoms would suggest to you that a patient should be referred to diagnostic services or secondary care for investigation of possible EB / a possible diagnosis of EB? (free text, spontaneous) (4% = 2 dermatologists)

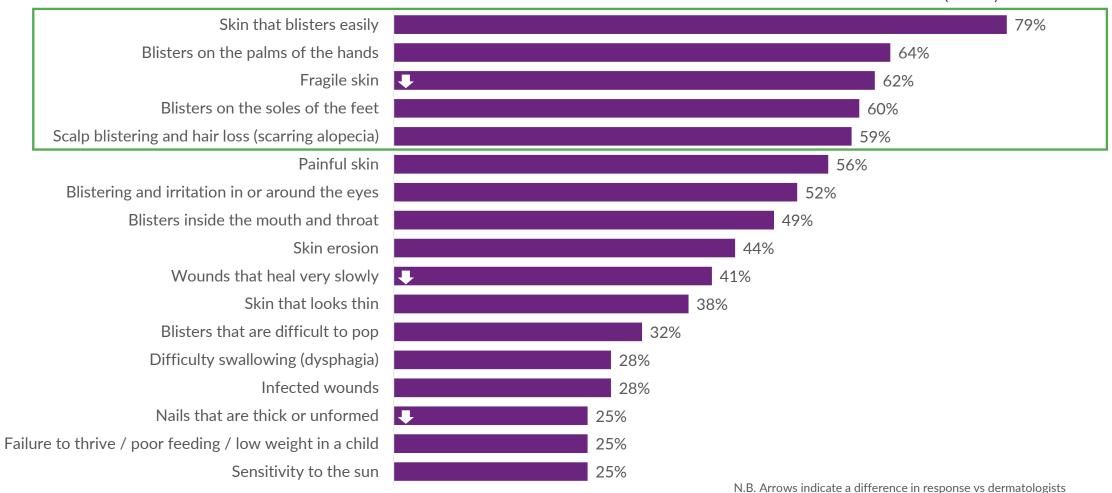


Q1 What signs or symptoms would suggest to you that a patient should be referred to diagnostic services or secondary care for investigation of possible EB / a possible diagnosis of EB?

GPs

GPs most associate EB with skin that blisters easily, fragile skin, blisters on palms/soles of feet and scalp blistering upon prompting

Which of the following symptoms would suggest to you that a patient should be referred to diagnostic services or secondary care for investigation of possible EB? (prompted, multicode)

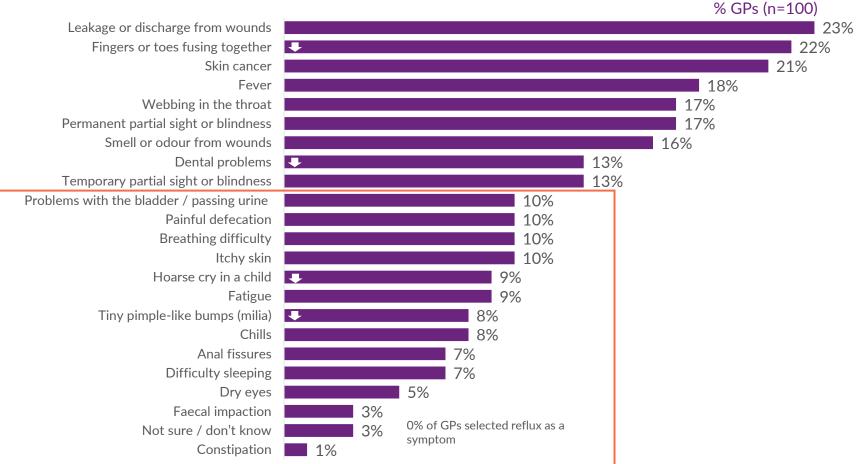


% GPs (n=100)

Base = 100 GPs

GPs least associate EB with...

Which of the following symptoms would suggest to you that a patient should be referred to diagnostic services or secondary care for investigation of possible EB? (prompted, multicode)

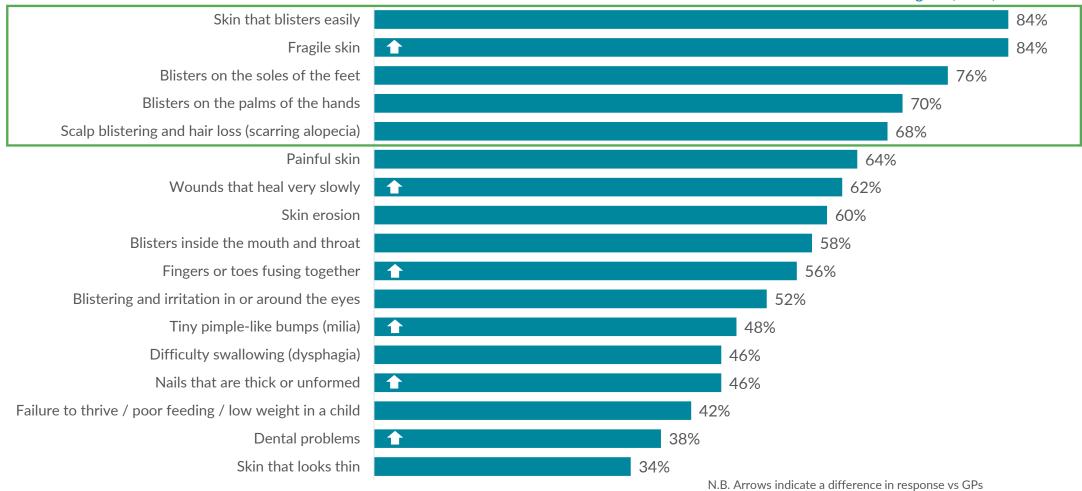


N.B. Arrows indicate a difference in response vs dermatologists

Base = 100 GPs

Dermatologists most associate EB with skin that blisters easily, fragile skin, blisters on palms/soles of feet and scalp blistering upon prompting

Which of the following symptoms would suggest to you that a patient should be referred to diagnostic services or secondary care for investigation of possible EB? (prompted, multicode)



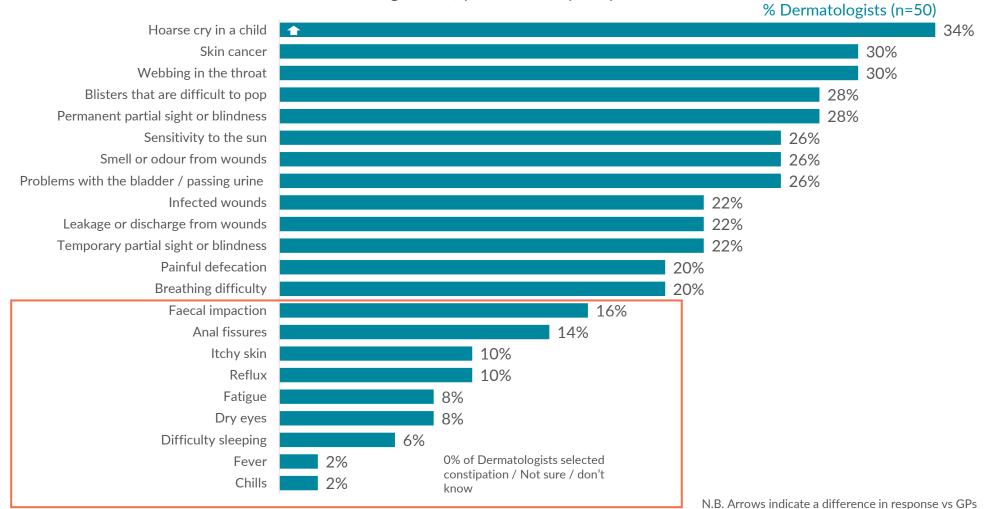
% Dermatologists (n=50)

Derms

Base = 50 Dermatologists

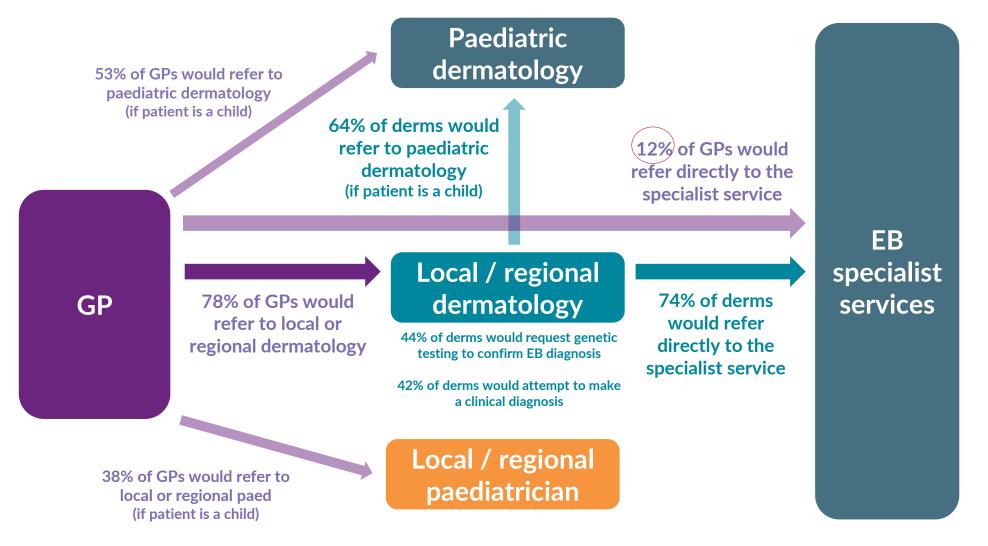
Dermatologists least associate EB with...

Which of the following symptoms would suggest to you that a patient should be referred to diagnostic services or secondary care for investigation of possible EB? (prompted, multicode)



Base = 50 Dermatologists

If you were to identify a potential EB patient, what actions would you take? (prompted, HCP able to select multiple options)



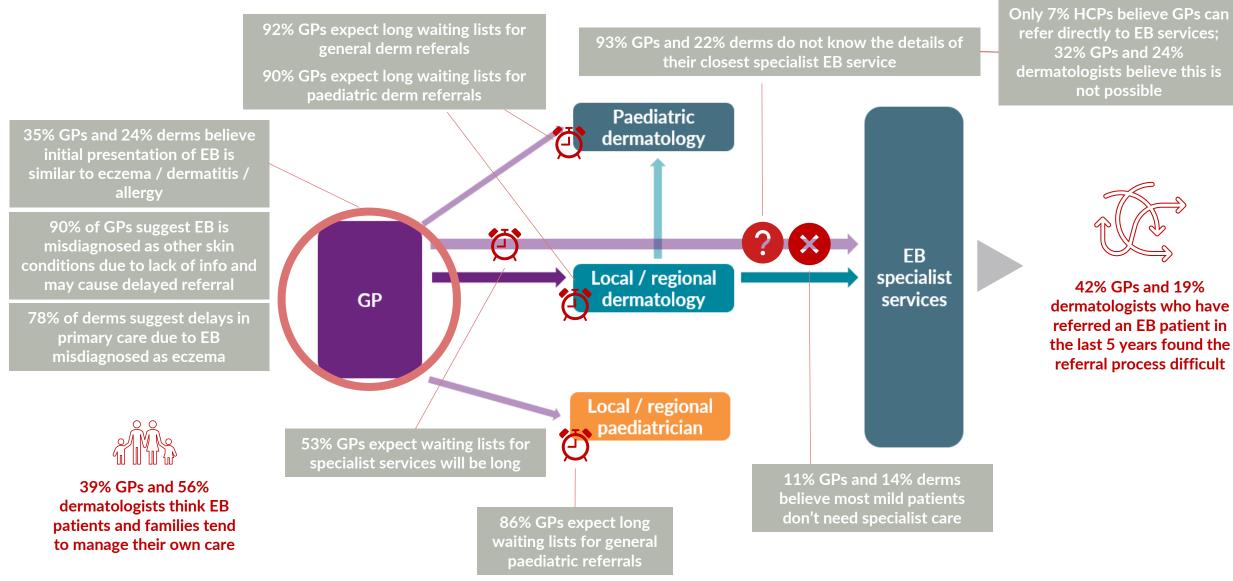
Base = 50 Dermatologists, 100 GPs

Q15: If you were to identify a potential EB patient, what actions would you take?

Barriers and delays to EB specialist services referral

GPs

Derms



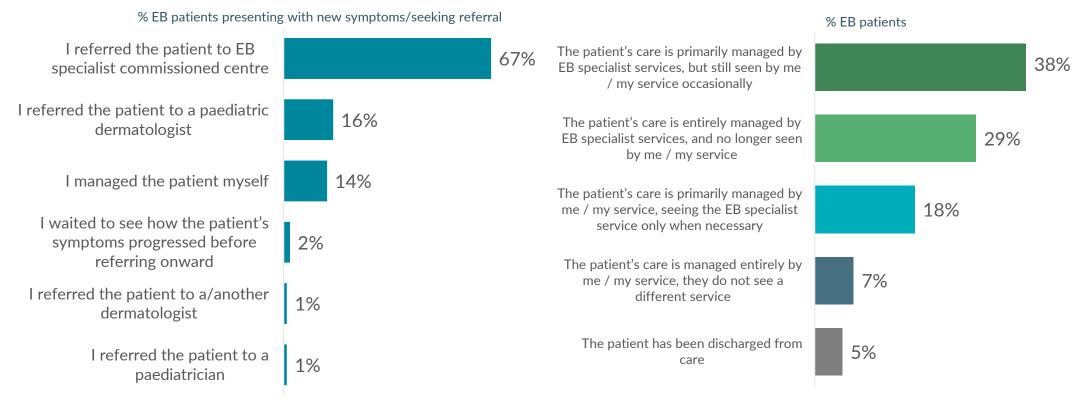
Base = 50 Dermatologists, 100 GPs

Q15: If you were to identify a potential EB patient, what actions would you take?

Dermatologists suggest the care of a minority of EB patients is managed entirely without the oversight of specialist services

Of the patients presenting with new EB symptoms or seeking a referral when you first saw them – which of the following actions did you take? (prompted)

How have the EB patients seen by dermatologists in the last 5 years been managed? (prompted)



Base: 25 dermatologists with EB patient(s) in last 5 years either presenting with new EB symptoms or seeking a referral into tertiary specialist care / 40 dermatologists who have seen an EB patient / last 4 years (1 x outliers excluded)

Q5 Of the ___patient(s) you said you have seen with EB in the last 5 years who were either presenting with new EB symptoms or seeking a referral into tertiary specialist care when you first saw them – which of the following actions did you take?

Q7 Of the patient(s) you have seen with EB in the last 5 years, how many have been managed as follows?

A disconnect exists between the role HCPs think their service should have in managing EB patients, and what they would be personally comfortable managing



Whilst over 4/5 GPs feel primary care should have a role in EB patient care and would be willing to take part in shared care arrangements

- 70% of GPs think even mild EB patients need specialist care
- 86% GPs would need to know more about EB before feeling comfortable to manage care of an EB patient
- Just under half would be comfortable managing mild patients, but over half have reservations about managing more severe cases

Dermatologists are more comfortable with the idea of shared care of EB patients

 95% agree that local secondary care should be involved in managing EB

GPs

Derms

• Most would be happy managing mild cases

However: two thirds would still not be comfortable with severe cases, and 52% agree the needs of EB patients are too complex for local secondary care to meet



86% of Dermatologists would feel positively towards the set up of an EB outreach clinic in their area

Even if specialist dressings are recommended, derms and GPs can be reluctant to prescribe; perception that specialist services should provide and manage this

3/4 HCPs agree primary care would manage pain medication and antibiotics for EB patients (GPs in particular, though some dermatologists envisage a greater role for themselves)

Lack of awareness around who manages specialist bandages – just over half of GPs and two thirds dermatologists say it will be specialist services



Uncertainty exists around who:



 Takes bloods for EB patients - 58% GPs say it would be primary care, but a quarter of dermatologists believe they would play this role

• Manages provision of needles – lack of consensus



claim to have an approved dressings list / formulary

prescribing outside of this list is difficult for the majority, especially dermatologists (84%)

Dermatologists agree

- specialist dressings may not be stocked by community pharmacies causing problems with fulfilling prescriptions for patients (82%)
- that recommendations for them don't always include all information needed to prescribe (76%)
 - and that they are under cost pressure to prescribe generic dressings (64%)

88% derms

agree GPs are not always happy to supply specialist dressings

would opt to prescribe similar generic dressings, even if specialist dressings were recommended



GPs

Derms



would always question requests for large quantities of dressings

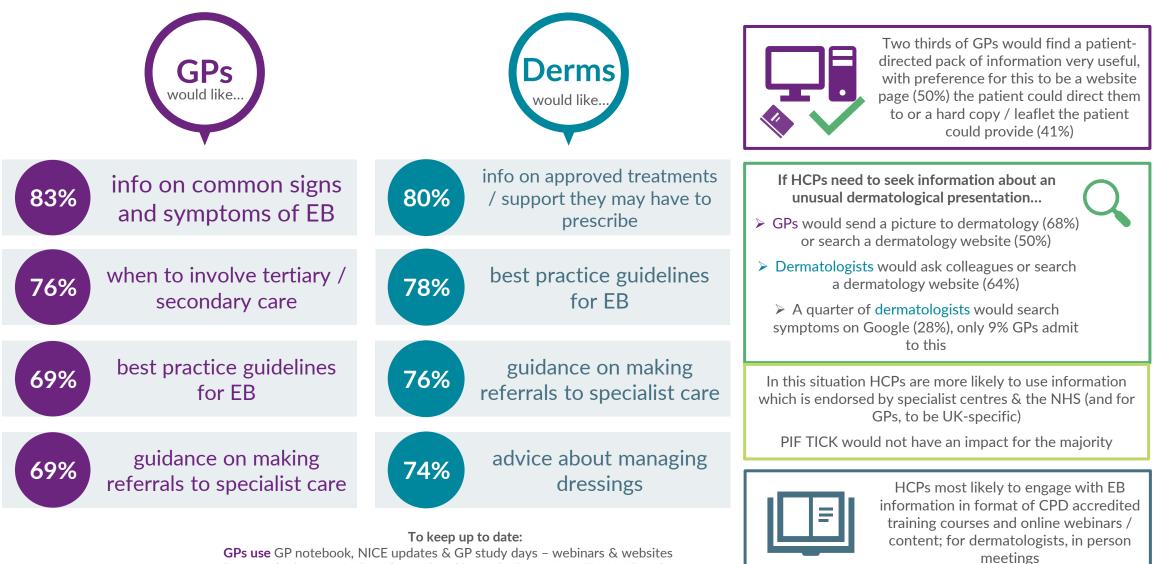
54% GPs and 46% dermatologists believe the cost of specialist dressings is not always covered by specialised commissioning



Communicating with GPs and dermatologists about EB

GPs

Derms



GPs use GP notebook, NICE updates & GP study days – webinars & websites **Dermatologists use** BAD and associated journals, DermNet NZ & NICE updates – conferences/events, local/regional meetings

Conclusions and Recommendations

- GPs appear to have reasonable spontaneous awareness of the signs and symptoms of EB but difficulty exists around recognising these in practice and referring EB correctly, in both primary and secondary care, despite many HCPs having seen an EB patient
- Destigmatise the complexity of managing EB and ensure links with specialist services are possible to increase HCP confidence in shared care arrangements, even for more complex patients
- There is a need for better communications with specialist centres around role of primary care and local secondary care – primary care expect to manage antibiotics and pain management for EB patients, but need for clarity around who is responsible for bandages, bloods and needles, and what is covered by specialised commissioning
- Need for education around ability to refer directly to specialist services and when this should be done currently, some patients are being managed entirely within local secondary care
- Prescriptions for specialist bandages need to specify exact type of dressing and justify why it is being prescribed to overcome any formulary barriers
 - Assistance may also be needed for pharmacy re: how to order stock
- In theory HCPs are receptive to more information about EB, but this should target the most effective channels and sources to ensure engagement
- Positive reactions to a 'GP' pack of information HCPs more likely to use information with NHS and specialist centre endorsement
- 🖸 Synergy

Patients Carers

EB Patient Survey Detailed findings

Patients Carers

EB diagnosis & management

Delays to diagnosis evident - although c. three quarters EB patients experienced symptoms from birth, only 38% were diagnosed at birth 95% patients have an EB diagnosis from a healthcare professional When did EB patients experience their first symptoms, and get diagnosed? Only 65% patients received their EB Once patients presented to a healthcare professional, it diagnosis within 1 year of took 6 months or less to experiencing symptoms receive a diagnosis for three quarters of EB patients (76% \geq 9% received a diagnosis within 1-5 % EB patients Age of diagnosis (n=298 diagnosed) Age of first symptoms (n-318) of the n=186 who could years of experiencing symptoms 38% From birth 73% remember how long the 16% 0-2yrs 14% diagnosis took) For 13%. it took between 5 and 20 5% 2-5yrs 3% \succ For the remaining quarter, vears 4% 5-10yrs 2% it took longer than 6 For 14% it took 20 years or longer 2% 6% 10-16yrs months 8% 16-30yrs _ 9% 30+ vrs On average EB Simplex patients experience first symptoms and Not sure / can't are diagnosed later than other EB types 7% 13%

Carers

Patients

Base 318 (215 Patients, 103 Carers)

S1 What is your age? S3 What is the age of the person you are supporting / were supporting when they died?

Q3 How old were you / the person you care for / the person you cared for when you / they first started to experience symptoms of EB? Q5 Have you / the person you care(d) for been told you have EB / been given an EB diagnosis by a healthcare professional? Q7 What age were you / they when you / they were diagnosed by a healthcare professional? Q8 How long did it take from when you / they first saw a healthcare professional about your / their EB symptoms, to getting diagnosed with EB?

remember

On average EB Simplex patients experience first symptoms and are diagnosed later than other EB types

			ЕВ Туре			Respond	ent Type	Severity			
	Total	SEB	DEB	JEB	KEB	Patient	Carer	Mild	Moderate	Severe	It depends
N=	318	193	97	13	5	215	103	83	108	39	85
Mean patient age (years)	38.1	39.9	36.4	24.2	34.2	48.5	16.3	41.0	40.4	25.3	39.2
Mean age of first symptoms (years, at birth = 0)	0.8	1.1	0.1	0.6	0.0	1.1	0.2	0.9	1.1	0.3	0.7
% experiencing first symptoms from											
Birth	73%	65%	87%	77%	100%	69%	80%	65%	74%	97%	66%
0-2yrs	14%	17%	8%	8%	0%	13%	16%	18%	11%	0%	19%
2-5yrs	3%	4%	1%	0%	0%	4%	1%	7%	1%	0%	2%
5-10yrs	2%	3%	0%	8%	0%	2%	1%	4%	1%	0%	2%
10-16yrs	2%	3%	0%	0%	0%	2%	0%	1%	2%	3%	1%
16-30yrs	<1%	<1%	0%	0%	0%	<1%	0%	0%	1%	0%	0%
30+ yrs	<1%	0%	0%	0%	0%	<1%	0%	0%	1%	0%	0%
% EB patients who have received an official diagnosis	95%	94%	96%	100%	100%	95%	94%	92%	97%	95%	95%
Mean age of diagnosis (years, birth = 0)	8.8	11.9	3.7	8.2	0.6	12.3	2.5	8.0	10.1	9.0	3.3
Mean time in years from first symptoms to diagnosis	6.9	9.6	2.8	4.7	0.6	10.0	1.6	8.9	5.6	3.0	9.1

All JEB and KEB patients are under specialist EB care, but only half of SEB and three quarters of DEB patients are (almost 40% SEB have *never* been seen) Overall 40% EB patients are not currently under EB specialist care

Is the EB patient under the care of an EB specialist hospital?

	% patients	Total	N=193 SEB	N=97 DEB	N=13 JEB	N=5 KEB	Mild N=83	Moderate N=108	Severe N=39	It depends N=85
	Yes – under the care of one of these hospitals	60%	50%	77%	100%	100%	39%	69%	82%	61%
	Was previously under the care of one of these hospitals, but not seen at any of them anymore	12%	12%	13%	0%	0%	20%	10%	3%	9%
 The following were named as EB specialist centres: Guys & St Thomas Hospitals, London Great Ormond Street Hospital, London Solihull Hospital Birmingham Children's Hospital 	No – not under the care of any specialist hospital for EB	28%	38%	9%	0%	0%	41%	20%	15%	29%
 Glasgow Royal Hospital for Children/Queen Elizabeth University Hospital 	DEBRA members, younger patien Patients who are older, white, a	t	o be uno	der EB s	pecialist	care		-		

Base 318 (215 Patients, 103 Carers)

Q9 Are you / is the person you care for / Was the person you cared for under the care of a specialist EB centre for your / their EB?

specialist care or not be under specialist care at all

DEBRA members, younger patients, ethnic minority patients and patients in the south of England are most likely to be under EB specialist care Patients who are older, white, and from Scotland or North England are more likely to have disengaged from specialist care or not be under specialist care at all

% patients / carers		DEBRA	Member				nt Age				Gender	Patient	ethnicity				Location			
so putients / calors	Total	Yes	No	Baby / toddler	Child	Teenager / young person	Adult 21- 40	Adult 41- 60	Adult 61+	Male	Female	White	Ethnic minority	England	Scotland	Wales	NI	North England	East & Midlands	South England
N=	318	286	32	20	38	23	93	79	65	109	201	292	24	253	45	14	6	46	81	126
Yes – under the care of one of these hospitals	61%	64%	34%	95%	89%	78%	62%	49%	38%	64%	58%	58%	88%	66%	38%	57%	0%	57%	63%	72%
Was previously under the care of one of these hospitals, but not seen at any of them anymore	12%	10%	25%	0%	0%	17%	13%	18%	11%	10%	13%	13%	0%	10%	20%	14%	0%	0%	15%	11%
No – not under the care of any specialist hospital for EB	28%	26%	41%	5%	11%	4%	25%	33%	51%	26%	29%	29%	13%	23%	42%	29%	100%	43%	22%	17%

NB a specialist hospital in Northern Ireland was not named in the question

Base 318 (215 Patients, 103 Carers)

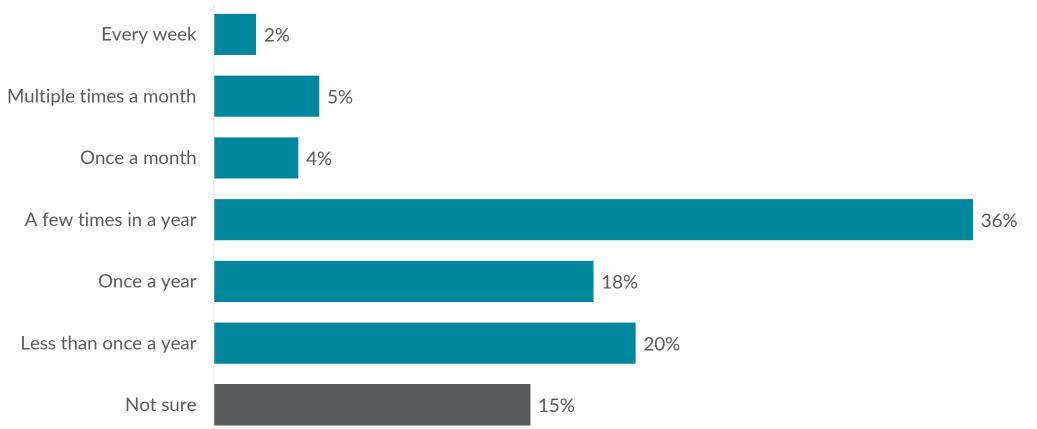
Q9 Are you / is the person you care for / Was the person you cared for under the care of a specialist EB centre for your / their EB?

C. half of EB patients attend medical appointments / see HCPs about their EB or relevant issues once or a few times a year; for two fifths this is less than once a year, and for a minority it is more frequent (once a month or more)

On average how frequently do you attend medical appointments or see healthcare professionals about your EB or issues relating to your EB?

Patients

Carers



Base 305 (215 Patients & 90 Current Carers)

Q15B On average how frequently do you attend medical appointments or see healthcare professionals about your EB or issues relating to your EB? / On average, how frequently do you support the person you care for to attend medical appointments or see healthcare professionals about their EB or issues relating to their EB?

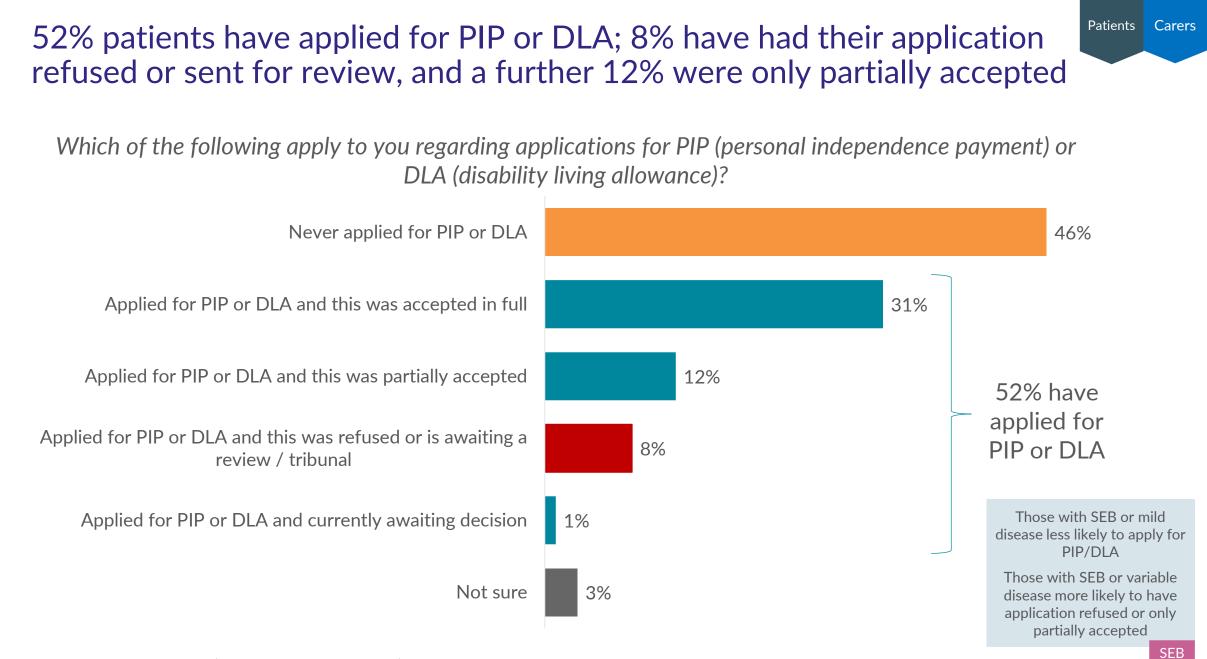
Typically, EB patients attend medical appointments / see HCPs about their EB or relevant issues a few times a year

	Total		EB Ty	ре		Respondent Type		Severity				
% Patients / carers selecting option	Total	SEB	DEB	JEB	KEB	Patient	Carer	Mild	Moderate	Severe	It depends	
N=	305	190	91	10	5	215	90	83	106	30	84	
Every week	2%	2%	4%	0%	0%	1%	6%	0%	3%	10%	1%	
Multiple times a month	5%	3%	8%	30%	0%	1%	13%	0%	3%	20%	6%	
Once a month	4%	1%	7%	30%	20%	1%	11%	1%	4%	7%	6%	
A few times in a year	36%	27%	53%	40%	60%	32%	44%	22%	49%	37%	32%	
Once a year	18%	21%	13%	0%	20%	19%	16%	20%	18%	7%	19%	
Less than once a year	20%	27%	7%	0%	0%	27%	3%	37%	12%	10%	17%	
Not sure / not applicable	15%	20%	9%	0%	0%	19%	7%	19%	11%	10%	19%	

N.B. caution interpreting percentages with a low base

Base 305 (215 patients and 90 current carers)

Q15B On average how frequently do you attend medical appointments or see healthcare professionals about your EB or issues relating to your EB? / On average, how frequently do you support the person you care for to attend medical appointments or see healthcare professionals about their EB or issues relating to their EB?



Base 318 (215 patients and 103 carers)

Q17 Which of the following apply to you / the person you care(d) for regarding applications for PIP (personal independence payment) or DLA (disability living allowance)?

Those with SEB or mild disease less likely to apply for PIP/DLA Those with SEB or variable disease severity more likely to have application refused or only partially accepted 97% severe patients have applied for PIP/DLA; JEB/DEB applications most likely to be accepted in full

			Respond	ent Type	Severity						
% patients / carers selecting option	Total	SEB	DEB	JEB	KEB	Patient	Carer	Mild	Moderate	Severe	It depends
N=	318	193	97	13	5	215	103	83	108	39	85
Never applied for PIP or DLA	46%	50%	39%	18%	0%	57%	20%	82%	41%	0%	36%
Applied for PIP or DLA and this was accepted in full	31%	24%	42%	82%	20%	20%	53%	8%	35%	86%	22%
Applied for PIP or DLA and this was partially accepted	12%	13%	9%	0%	60%	10%	16%	1%	13%	9%	22%
Applied for PIP or DLA and this was refused or is awaiting a review / tribunal following refusal	8%	10%	3%	0%	20%	9%	6%	6%	6%	3%	14%
Applied for PIP or DLA and currently awaiting decision	1%	1%	2%	0%	0%	1%	1%	1%	3%	0%	0%
Not sure	3%	2%	4%	0%	0%	2%	3%	1%	2%	3%	5%

N.B. caution interpreting percentages with a low base

Base 318 (215 patients and 103 carers)

Q17 Which of the following apply to you / the person you care(d) for regarding applications for PIP (personal independence payment) or DLA (disability living allowance)?

Patients Carers

EB Symptoms & Impact on QOL

Skin that blisters easily, blisters on soles of feet and fragile skin are experienced by at least ³/₄ patients and for the majority this highly impacts their daily lives; Some symptoms highly impact day to day life but are only experienced by a minority of patients

How much impact	does each sym	ptom experienced ha	ive on patient's li	ves?	% patients / carers	experienced ea symptom (n=31
Permanent partial sight or blindness			100%			7%
Blisters on the soles of the feet		69%		25%	6 7%	78%
Temporary partial sight or blindnes		67%		24%	10%	2%
Skin that blisters easily		65%		29%	6%	90%
Difficulty swallowing (dysphagia)		64%		29%	7%	25%
Blisters constricting or narrowing food pipe (oesophagus)		63%		30%	5%	19%
Webbing in the throat		60%		28%	13%	13%
Problems with the bladder / passing urine e.g., urethral stricture		59%		30%	7% 4%	8%
Fragile skin		58%		33%	8%	76%
Fatigue		54%		37%	9%	46%
Painful skin		52%		38%	9%	69%
Skin erosion / breakdown of outer layer of skin		51%		35%	14%	54%
Difficulty sleeping		51%		42%	7%	43%
Wounds that heal very slowly		50%		37%	12%	63%
Blistering and/or irritation in or around the eyes		49%		36%	13%	22%
Breathing difficulty		48%		43%	10%	7%
Dental problems, such as tooth decay or teeth falling out		47%		38%	14%	33%
Fingers or toes fusing together		47%	28	%	22% 3%	10%
Skin cancer		46%	31	%	19% 4%	8%
	High impact	Moderate impact	Low impact	■ No impact at all	■ Not sure	

Base Patients & Carers (excluding past carers of patients under 2); Base for each symptom variable

N.B. Percentages <3% not labelled for clarity

Patients Carers

Q14A For each of the symptoms you / the person you care(d) for have experienced, please tell us: How much impact they have had on your / their daily life? Q14B How frequently the symptom affects you / them?

Even the less impactful EB symptoms have a high or moderate impact on the daily lives of c. two thirds of patients who experience them

How much impact do	pes each sympt	tom experienced he	ave on patient's liv	/es? %	6 patients / carers	experienced each symptom (n=318)
Blisters inside the mouth and throat	L	41%	43	%	16%	48%
Infected wounds	4	41%	34%		24%	55%
Anal fissures - sores, tears or ulcers near the anus / back passage	4	41%	39%	6	20%	32%
Nails that are thick or unformed	4	0%	23%	27%	10%	54%
Sensitivity to the sun	38	8%	48	%	14%	33%
Scalp blistering and hair loss (scarring alopecia)	37	7%	25%	33%	3%	22%
Dry eyes	37	7%	42%		18% 3%	34%
Constipation	37	7%	47%)	16%	33%
Blistering in or around the genitals	37	7%	45%		16%	27%
Fecal impaction	37	7%	49	%	14%	16%
Itchy skin	36	%	40%		22% 2%	68%
Painful passing of stools (poo)	36	%	50%	%	14%	34%
Blisters on the palms of the hands	349	%	42%		22% 2%	60%
Blisters that you are unable to pop	349	%	47%		16% 2%	50%
Leakage or discharge from wounds	349	%	38%		27%	53%
Skin that looks thin	33%	6	38%	24	% 5%	38%
Reflux	31%		47%		22%	29%
Fever	31%		39%	3	31%	12%
Chills	23%		50%	2	25% 3%	13%
Smell or odour from wounds	22%		46%	30)% 2%	41%
Tiny pimple-like bumps (milia)	16%	23%	37%		24%	43%
	High impact	Moderate impact	Low impact	■ No impact at all	■ Not sure	

Base Patients & Carers (excluding past carers of patients under 2); Base for each symptom variable

N.B. Percentages <2% not labelled for clarity

Patients Carers

% patients

Q14A For each of the symptoms you / the person you care(d) for have experienced, please tell us: How much impact they have had on your / their daily life? Q14B How frequently the symptom affects you / them?

Skin symptoms can be seasonal for some, but for c. three quarters they are frequent or daily Three quarters of those with fatigue experience it frequently (1/2)

How frequently do patients experience each sympton	Freque Intern Rarely	day / most days ently (often, but not e nittent / variable (can / (can go several mont nal (only with certain ure	go for weeks or hs or years with	out experie	ncing) asons)	encing) 6 patients / carers	% patients experienced each symptom (n=318)
Permanent partial sight or blindness		71%			29	9%	2%
Fingers or toes fusing together		66%		6%	9%	13% <mark>3%</mark> 3%	10%
Nails that are thick or unformed	t	51%		17%	129	6 7% 3%	54%
Fragile skin	53%			28%		11% 3% <mark>4%</mark>	76%
Problems with the bladder / passing urine	52%		22	%	7%	15% <mark>4%</mark>	8%
Dry eyes	47%		23%		20%	8%	34%
Painful skin	44%		29%		17%	8%	69%
Skin that looks thin	41%		28%		24%	6%	38%
Itchy skin	40%		28%		24%	3% 5%	68%
Skin erosion / breakdown of outer layer of skin	38%		28%	17	%	9% 8%	54%
Skin that blisters easily	37%		37%		15%	(11%)	90%
Reflux	35%	23%		(34	4%)	8%	29%
Difficulty sleeping	35%		35%		19%	4% 8%	43%
Scalp blistering and hair loss (scarring alopecia)	34%	21%		(31%)		12%	22%
Fatigue	34%		(43%)		1	8% 3 <mark>%</mark> %	46%
Difficulty swallowing (dysphagia)	33%	29%		2	5%	11%	25%
Webbing in the throat 30	0%	33%		23%	6	13% 3%	13%
Breathing difficulty 29	7%	38%	0		29%	5%	7%
Dental problems, such as tooth decay or teeth falling out 27	%	24%		30%		19%	33%

N.B. Percentages <3% not labelled for clarity

Patients Carers

Base Patients & Carers (excluding past carers of patients under 2); Base for each symptom variable

Q14A For each of the symptoms you / the person you care(d) for have experienced, please tell us: How much impact they have had on your / their daily life? Q14B How frequently the symptom affects you / them?

Blisters on soles of feet, blisters you are unable to pop and sensitivity to the sun can be seasonal Three fifths of those with slow healing wounds and blisters in mouth/throat experience this frequently or every day/most days (2/2)

How frequently do patients experience each symptom?

Tiny pimple-like bumps (milia) Wounds that heal very slowly Blisters on the soles of the feet Constipation Leakage or discharge from wounds Skin cancer Blisters inside the mouth and throat Blistering and/or irritation in or around the eyes Blisters constricting or narrowing food pipe (oesophagus) Anal fissures Painful passing of stools (poo) Sensitivity to the sun Chills Temporary partial sight or blindness Blisters on the palms of the hands Smell or odour from wounds Blistering in or around the genitals Blisters that you are unable to pop -10 Fecal impaction 8% Infected wounds 6%

3%

Fever

Every day / most days

Frequently (often, but not every day)

Intermittent / variable (can go for weeks or months without experiencing)

Rarely (can go several months or years without experiencing)

, .	SeasonalNot sure	(only with certain we	eather / during cer	tain seasons) % pa	ntients / carers	% patients experienced each symptom (n=318)
25%		29%	29%		15%	43%
25%		36%		27%	8% 4%	63%
23%		36%	20%	4%	(17%)	78%
22%		38%		31%	9%	33%
21%		37%	26	%1	.2% 5%	53%
19%	8%	19%		54%		8%
19%		39%	2	28%	13%	48%
19%	28%	6	29%	23	%	22%
18%	34	1%	36%	6	13%	19%
17%	28%		36%		19%	32%
16%		10%		37%	7%	34%
16%	27%	16%		(39%)		33%
15%	385	%	33%	8	% 8%	13%
14%	4	-3%		33%	10%	7%
13%	28%		29%	23%	7%	60%
13%	27%		41%	1	.8%	41%
13%	29%		36%	19	9%	27%
0%	31%		36%	10%	(14%)	50%
%	39%		(45%	%	8%	16%
	22%	(41%)		26%	3%	55%
19%		39%		33%	6%	12%

N.B. Percentages <3% not labelled for clarity

Patients

% natients

Carers

Base Patients & Carers (excluding past carers of patients under 2); Base for each symptom variable Q14A For each of the symptoms you / the person you care(d) for have experienced, please tell us: How much impact they have had on your / their daily life? Q14B How frequently the symptom affects you / them?

Patients EB highly impacts patients' ability to exercise and be mobile and active; over half state EB has moderate/high impact on their self-confidence, hobbies, enjoying life, working/studying, and mental health; planning and aspirations for future are moderately/highly impacted for c. half

Please tell us how much impact EB has / had on each of these aspects of you / the person you care for's life (prompted)

	70 Patietit a	nu carers (II-510	uniess otherwise sp		
Exercise	4	4%	34%	17% 4%	
Everyday mobility and physical activity	34%		36%	24% 6%	Greater EB severity correlates
Self-confidence	31%		33%	22% 11%	with extent of impact EB has on
Hobbies	27%	3	5%	28% 8%	all aspects of life
Enjoying life	21%	39%		29% 10%	For 80% SEB patients exercise
Going to work / study (Patients & current carers of patients aged 5+, n=291)	25%	32%	24	% 19%	is moderately or
Mental health	25%	31%	27	^{'%} 15%	highly impacted, but there is less
Planning for the future (Patients $\&$ current carers of patients aged 16+, n=248)	25%	26%	29%	20%	impact on ability
Aspirations for the future (Patients & current carers of patients aged 12+, n=254)	21%	29%	26%	23%	to care for themselves
Sleep	19%	28%	28%	23%	For DEB patients
Being independent	20%	25%	29%	25%	self-confidence, intimate
Spending quality time with family / friends	15%	28%	31%	25%	relationships and
Intimate relationships (Patients & current carers of patients aged 16+, n=248)	20%	23%	27%	29%	managing finances is particularly
Carrying out simple daily tasks e.g. preparing food, getting dressed	20%	21%	25%	32%	affected
Personal hygiene e.g. washing, brushing teeth	16%	23%	28%	33%	For JEB, every- day mobility,
Eating and drinking	14%	22%	28%	36%	simple tasks and
Managing the finances (Patients $\&$ current carers of patients aged 16+, n=248)	8% 19%	27%		46%	sleep are most impacted
				· · · · · · · · · · · · · · · · · · ·	

% Patient and carers (n=318 unless otherwise specified)

Carers

■ High impact ■ Moderate impact ■ Low impact ■ No impact at all ■ Not sure N.B. Percentages <4% not labelled for clarity

Base 318 (215 Patients and 103 carers)

Q14C Please tell us how much impact EB has / had on each of these aspects of you / the person you care(d) for daily life.

Impact correlates with disease severity; for SEB there is less impact on ability to care for themselves

	T ()			Respondent Type		Severity					
% selecting high or moderate impact	Total	SEB	DEB	JEB	KEB	Patient	Carer	Mild	Moderate	Severe	It depends
N=	318	193	97	13	5	215	103	83	108	39	85
Exercise	77%	80%	73%	91%	60%	78%	77%	55%	82%	89%	87%
Everyday mobility and physical activity	70%	68%	73%	82%	80%	67%	77%	35%	81%	100%	75%
Self-confidence	64%	56%	77%	64%	80%	64%	63%	42%	69%	97%	64%
Hobbies	61%	60%	64%	64%	60%	60%	62%	33%	71%	89%	65%
Enjoying life	60%	56%	66%	64%	60%	57%	67%	30%	66%	94%	69%
Going to work / study (n=291)	57%	53%	66%	67%	75%	53%	68%	28%	68%	97%	56%
Mental health	55%	51%	63%	55%	60%	54%	57%	34%	58%	89%	59%
Planning for the future (n=248)	51%	46%	64%	50%	75%	48%	70%	21%	55%	100%	61%
Aspirations for the future (n=254)	50%	44%	69%	33%	75%	47%	72%	22%	57%	95%	58%
Sleep	47%	36%	66%	73%	20%	41%	59%	24%	48%	91%	49%
Being independent	45%	38%	59%	64%	60%	38%	60%	10%	49%	97%	51%
Spending quality time with family / friends	43%	42%	47%	55%	60%	39%	54%	17%	47%	91%	45%
Intimate relationships (n=248)	42%	32%	66%	50%	50%	40%	55%	21%	48%	83%	43%
Carrying out simple daily tasks e.g. preparing food, getting dressed	41%	31%	58%	64%	80%	34%	55%	10%	48%	97%	36%
Personal hygiene e.g. washing, brushing teeth	38%	25%	59%	55%	100%	33%	50%	12%	40%	97%	36%
Eating and drinking	36%	19%	64%	55%	100%	31%	47%	11%	44%	83%	31%
Managing the finances (n=248)	27%	22%	37%	17%	50%	26%	30%	6%	26%	65%	36%

Base 318 (215 Patients and 103 carers) – bases variable where stated

N.B. caution interpreting percentages with a low base

Patients Carers

Q14C Please tell us how much impact EB has / had on each of these aspects of you / the person you care(d) for daily life.

On a typical day, the most time each day is spent resting / recovering, with about an hour each for hygiene and blister care, but much longer for severe patients

Please think about a typical day. On average, how much time do you spend on each of the following activities? (prompted)

	% who spend 0 hours per day on activity	Of those who do undertake each activity, mean hours a day spent on each activity	
Time spent resting / recovering	33%	4.1	Severe and variable spend more time resting
Time spent on hobbies	32%	1.7	Mild spend slightly more time on hobbies
Time spent on personal hygiene	15%	1.2	Severe spend more time on hygiene
Time spent on blister / wound care	19%	1.0	Significantly more time spent on blister / wound care for severe
Time spent on food prep	55%	1.0	JEB and severe spend more time
Time spent getting dressed	21%	0.6	Severe and variable much more time

Base All patients able to answer (172)

Q15 Please think about a typical day. On average, how much time do you spend on each of the following activities?

Severe patients spend much longer undertaking activities of daily living

Of those undertaking the activity,	Total		EB 1	Гуре		Respond	ent Type	Severity					
mean hours spent	lotai	SEB	DEB	JEB	КЕВ	Patient	Carer	Mild	Moderate	Severe	It depends		
N=	172	104	53	5	3	172		49	63	12	47		
Time spent resting / recovering	4.1	4.4	4.0	4.3	2.8	4.1	-	3.4	3.4	6.3	5.1		
Time spent on hobbies	1.7	1.8	1.6	2.1	1.5	1.7	-	2.0	1.6	1.2	1.7		
Time spent on personal hygiene – bathing, washing, going to the toilet, eye care	1.2	1.1	1.4	1.3	1.0	1.2	-	1.0	1.0	2.2	1.2		
Time spent on blister / wound care including removing and applying dressings or bandages	1.0	0.8	1.5	1.4	0.4	1.0	-	0.5	0.8	2.6	1.1		
Time spent on food preparation – e.g. if needing to puree food	1.0	0.9	1.1	1.7	0.9	1.0	-	0.9	1.0	2.0	0.8		
Time spent on getting dressed	0.6	0.7	0.5	0.5	0.6	0.6	-	0.3	0.5	0.7	0.9		

Base All patients who spend time on an activity (172)

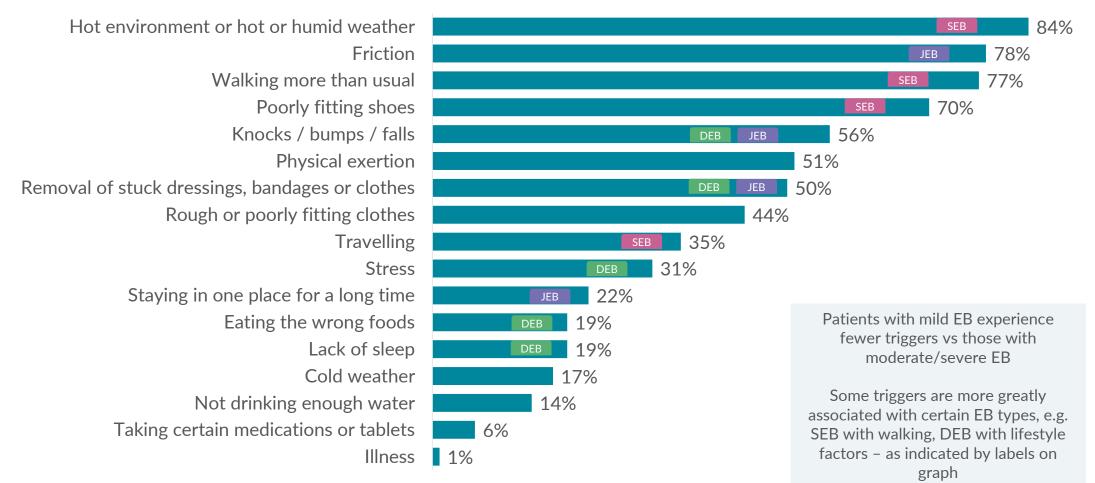
Q15 Please think about a typical day. On average, how much time do you spend on each of the following activities?

EB most commonly triggered by heat, friction, walking more than usual and poorly fitting shoes

What, if anything, triggers your EB symptoms to flare up or to get worse? (multicode)

Patients

Carers



Base 318 (215 patients, 90 carers)

Q16 What, if anything, triggers your EB symptoms to flare up or to get worse?

Overall, patients with mild symptoms experience fewer triggers for EB (except walking/ shoes), and some triggers are more greatly associated with certain EB types, e.g. SEB with walking / shoes, DEB with lifestyle factors

		ЕВ Туре					lent Type	Severity				
% Patients and carers selecting option	Total	SEB	DEB	JEB	KEB	Patient	Carer	Mild	Moderate	Severe	It depends	
N=	318	193	97	13	5	215	103	83	108	39	85	
Hot environment or hot or humid weather	84%	94%	68%	85%	80%	83%	86%	75%	83%	87%	94%	
Friction – due to clothing, furniture or other	78%	78%	79%	92%	60%	78%	79%	72%	84%	85%	75%	
Walking more than usual	77%	88%	63%	62%	60%	79%	74%	67%	81%	62%	89%	
Poorly fitting shoes	70%	75%	65%	54%	60%	74%	62%	70%	73%	59%	73%	
Knocks / bumps / falls	56%	36%	91%	85%	60%	50%	70%	47%	65%	82%	42%	
Physical exertion	51%	56%	43%	46%	40%	52%	49%	35%	59%	56%	55%	
Removal of stuck dressings, bandages or clothes	50%	38%	71%	85%	40%	44%	63%	25%	56%	85%	52%	
Rough or poorly fitting clothes	44%	44%	47%	54%	20%	39%	55%	29%	50%	64%	42%	
Travelling	35%	40%	29%	38%	40%	34%	37%	17%	41%	56%	36%	
Stress	31%	21%	53%	31%	20%	32%	30%	18%	37%	49%	28%	
Staying still in one place for a long time – e.g. long periods of sitting or lying down	22%	16%	29%	77%	20%	19%	28%	7%	22%	54%	21%	
Eating the wrong foods	19%	12%	34%	31%	20%	19%	20%	6%	24%	46%	14%	
Lack of sleep	19%	11%	36%	23%	0%	17%	24%	6%	24%	46%	13%	
Cold weather	17%	7%	36%	15%	60%	19%	15%	6%	22%	26%	18%	
Not drinking enough water	14%	7%	23%	31%	60%	10%	21%	6%	15%	33%	9%	
Taking certain medication or tablets	6%	3%	12%	15%	0%	4%	11%	0%	6%	28%	1%	
Other (please specify)	3%	2%	4%	0%	20%	2%	4%	0%	3%	5%	5%	
Illness	1%	1%	2%	0%	0%	1%	1%	2%	1%	0%	0%	
Nothing / no triggers	1%	0%	2%	0%	0%	1%	1%	2%	0%	3%	0%	
Not sure	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	

Base 318 (215 patients and 103 carers)

N.B. caution interpreting percentages with a low base

Patients Carers

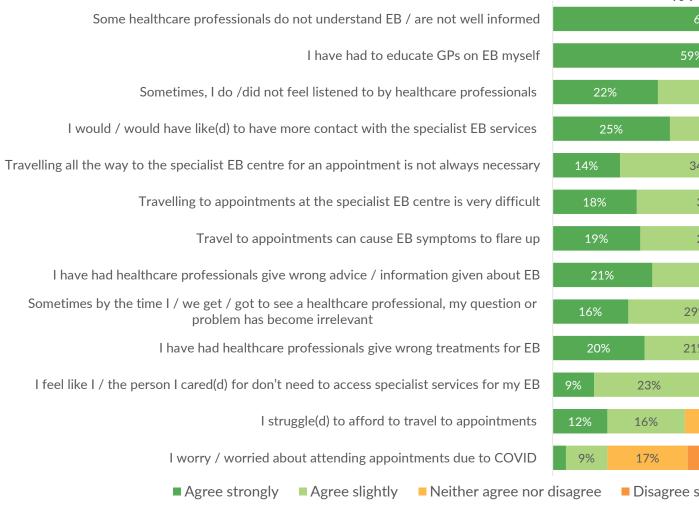
Q16 What, if anything, triggers your EB symptoms to flare up or to get worse?

Patients Carers

Attitudes to care

90% of EB patients and carers feel HCPs do not understand EB and 85% have had to educate GPs on EB themselves; c.half do not feel listened to by healthcare professionals and would like more contact with specialist services

To what extent do you agree or disagree with each of the following statements? (prompted)



% Patient and carers (n=318)

4% 25% 59% 4% 26% 7% 15% 32% 15% 6% 5% 29% 26% 21% 14% 34% 14% 30% 18% 15% 29% 18% 26% 16% 13% 29% 19% 21% 15% 19% 12% 34% 17% 19% 22% 42%

Disagree slightly Disagree strongly Not sure

N.B. Percentages <4% not labelled for clarity

Severe, ethnic minority patients and those in North England are more likely to struggle with travelling to appointments, with ethnic minority patients finding them less useful / necessary; SEB & patients with mild symptoms, adults over 61 and c. a quarter those not currently under specialist care more likely to feel they are coping fine without specialist services SEB, severe & variable severity patients most likely to feel HCPs are not well informed about EB Carers of young children are most likely to have had to educate GPs on EB themselves and women are more likely to experienced HCP mistreatment or lack of awareness

Carers

Patients

Base 318 (215 Patients and 103 carers) Q12 To what extent do you agree or disagree with each of the following statements? Severe patients are more likely to struggle with travelling to appointments; SEB patients and those with mild disease slightly more likely to feel they are coping fine without specialist services; SEB patients most likely to feel HCPs are not well informed about EB

Patients Carers

			EB Ty	pe	1	Respond	ent Type	Severity				
% Patients and carers selecting strongly agree	Total	SEB	DEB	JEB	KEB	Patient	Carer	Mild	Moderate	Severe	It depends	
N=	318	193	97	13	5	215	103	83	108	39	85	
Some healthcare professionals do not understand EB / are not well informed	67%	72%	65%	54%	20%	66%	69%	60%	67%	72%	72%	
I have had to educate GPs on EB myself	61%	66%	54%	54%	80%	61%	63%	60%	60%	56%	67%	
I would / would have like(d) to have more contact with the specialist EB services	26%	26%	24%	31%	40%	25%	27%	14%	27%	38%	28%	
Sometimes, I do/did not feel listened to by healthcare professionals	23%	24%	22%	0%	20%	20%	29%	16%	25%	26%	27%	
l have had healthcare professionals give wrong advice / information given about EB	22%	24%	20%	8%	0%	25%	16%	19%	22%	15%	27%	
I have had healthcare professionals give wrong treatments for EB	20%	21%	19%	15%	0%	23%	15%	22%	18%	13%	24%	
Travel to appointments can cause EB symptoms to flare up	19%	23%	13%	23%	20%	17%	24%	4%	19%	33%	26%	
Sometimes by the time I / we get to see a healthcare professional, my question or problem has become irrelevant	17%	20%	11%	15%	0%	17%	15%	14%	15%	15%	20%	
Travelling to appointments at the specialist EB centre is very difficult	13%	14%	13%	15%	20%	11%	18%	6%	12%	28%	15%	
l struggle(d) to afford to travel to appointments	12%	10%	15%	15%	20%	12%	12%	4%	13%	18%	15%	
Travelling all the way to the specialist EB centre for an appointment is not always necessary	11%	13%	9%	8%	0%	10%	13%	6%	13%	8%	13%	
I feel like I don't need to access specialist services for my EB – coping fine as I am	9%	12%	4%	0%	0%	11%	5%	19%	5%	3%	7%	
I worry / worried about attending appointments due to COVID	3%	1%	4%	8%	20%	1%	6%	1%	2%	8%	2%	

Base 318 (215 Patients and 103 carers)

Q12 To what extent do you agree or disagree with each of the following statements?

N.B. caution interpreting percentages with a low base

94

Carers of young children most likely to have had to educate GPs on EB; ethnic minority patients more likely to struggle with travelling to appointments, finding them not always useful / necessary; women more likely to experienced HCP mistreatment or lack of awareness; those in north England more likely to find travelling to specialist centre difficult; older adults (61+) and those not currently under specialist care (c. a quarter) more likely feel they are coping fine as they are without this

Patients Carers

%Patients and carers selecting strongly			care of t centre?	Patient Age						Patient	Gender	Patient ethnicity		Location		
agree	Total	Yes	No / not sure	Baby / toddler	Child	Teenager / young person	Adult 21-40	Adult 41-60	Adult 61+	Male	Female	White	Ethnic minority	North England	East & Midlands	South England
N=	318	193	125	20	38	23	93	79	65	108	201	292	24	46	81	126
Some healthcare professionals do not understand EB / are not well informed	67%	64%	73%	70%	76%	77%	55%	71%	71%	60%	71%	68%	63%	63%	71%	64%
I have had to educate GPs on EB myself	61%	60%	64%	75%	73%	55%	53%	67%	58%	54%	65%	62%	54%	53%	69%	63%
I would like/would have liked to have more contact with the specialist EB services	26%	22%	32%	30%	27%	32%	27%	23%	22%	24%	27%	25%	33%	26%	21%	22%
Sometimes, I do/did not feel listened to by healthcare professionals	23%	23%	23%	25%	32%	27%	21%	15%	29%	21%	25%	24%	17%	19%	18%	27%
I have had healthcare professionals give wrong advice / information given about EB	22%	20%	25%	15%	14%	14%	26%	24%	22%	15%	26%	22%	13%	16%	18%	24%
I have had healthcare professionals give wrong treatments for EB	20%	18%	24%	20%	11%	9%	18%	26%	27%	12%	25%	21%	8%	14%	22%	19%
Travel to appointments can cause EB symptoms to flare up	19%	24%	11%	25%	27%	14%	18%	21%	15%	14%	22%	17%	42%	16%	22%	22%
Sometimes by the time I/we get to see a healthcare professional, my question or problem has become irrelevant	17%	15%	19%	15%	14%	18%	18%	18%	15%	15%	17%	15%	33%	19%	16%	16%
Travelling to appointments at the specialist EB centre is very difficult	13%	19%	4%	10%	14%	36%	10%	15%	8%	17%	12%	12%	29%	23%	10%	15%
l struggle(d) to afford to travel to appointments /	12%	14%	9%	10%	16%	14%	11%	17%	5%	12%	12%	11%	17%	14%	10%	11%
Travelling all the way to the specialist EB centre for an appointment is not always necessary	11%	16%	2%	20%	19%	5%	8%	10%	10%	11%	11%	10%	25%	7%	10%	17%
I feel like I don't need to access specialist services for my EB – coping fine as I am	9%	1%	23%	10%	5%	0%	9%	6%	19%	7%	10%	10%	4%	16%	6%	6%
I worry/worried about attending appointments due to COVID	3%	3%	3%	10%	5%	0%	1%	3%	3%	3%	3%	2%	4%	7%	4%	1%

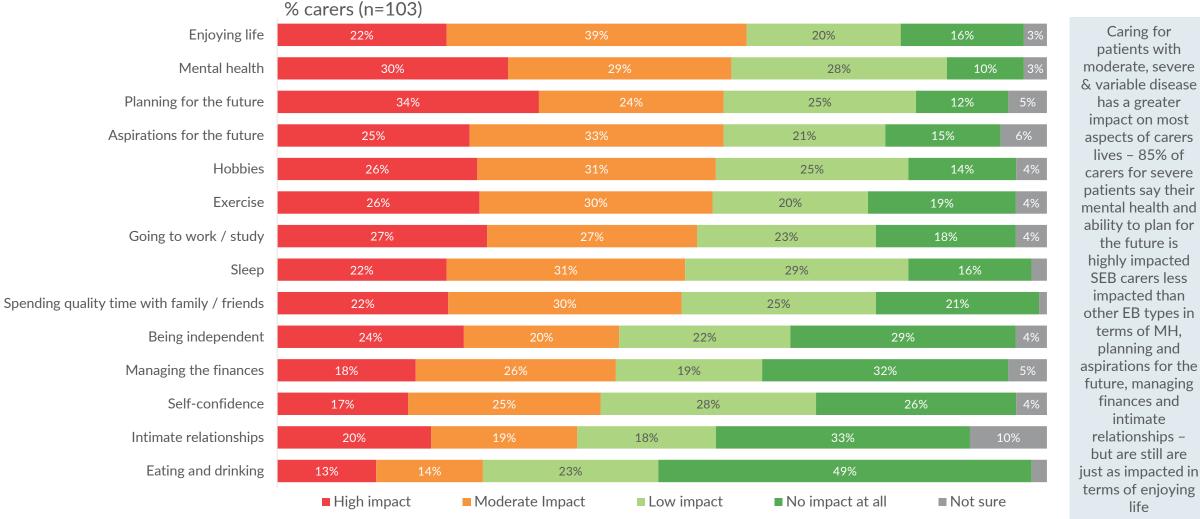
Base 318 (215 patients and 103 carers)

Q12 To what extent do you agree or disagree with each of the following statements?

Impact of EB on carers

C.60% of carers for EB patients have found that their caring responsibilities have high/moderate impact their enjoyment of life and mental health

Please tell us how much impact EB has on each aspects of your daily life as a carer for someone with EB. (prompted)



Base 103 carers

97

N.B. Percentages <3% not labelled for clarity

Q18 Please tell us how much impact EB has / had on each aspects of your daily life as a carer for someone with EB.

Caring for patients with moderate, severe & variable disease has a greater impact on most aspects of carers lives – 85% of carers for severe patients say their mental health and ability to plan for the future is highly impacted

SEB carers less impacted than other EB types in terms of MH, planning and aspirations for the future, managing finances and intimate relationships – but are still are just as impacted in terms of enjoying life

			EB Ty	ре	Severity					
%Patients and carers selecting 'High Impact'	Total	SEB	DEB	JEB	KEB	Mild	Moderate	Severe	It depends	
Total	103	53	38	8	2	13	33	26	29	
Enjoying life	61%	58%	61%	75%	100%	23%	61%	77%	62%	
Mental health	59%	47%	71%	63%	100%	46%	45%	85%	55%	
Planning for the future	58%	42%	74%	75%	100%	46%	55%	85%	41%	
Aspirations for the future	58%	47%	68%	75%	100%	31%	52%	81%	55%	
Hobbies	57%	57%	53%	75%	100%	23%	67%	65%	52%	
Exercise	56%	57%	45%	88%	100%	23%	67%	62%	52%	
Going to work / study	54%	53%	50%	75%	100%	31%	52%	69%	52%	
Sleep	53%	47%	53%	88%	100%	23%	52%	77%	45%	
Spending quality time with family / friends	52%	43%	58%	75%	100%	23%	52%	73%	45%	
Being independent	45%	38%	47%	63%	100%	31%	45%	62%	31%	
Managing the finances	44%	32%	50%	75%	100%	23%	33%	65%	41%	
Self-confidence	42%	40%	37%	63%	100%	8%	39%	54%	45%	
Intimate relationships	40%	25%	50%	75%	100%	15%	36%	65%	28%	
Eating and drinking	26%	15%	26%	75%	100%	8%	27%	35%	21%	

98

Base 103 carers

N.B. caution interpreting percentages with a low base

Q18 Please tell us how much impact EB has / had on each aspects of your daily life as a carer for someone with EB.



On a typical day, the most time each day is spent resting / recovering, with carers spending about an hour each for hygiene and blister care, but much longer for severe patients

	% who spend 0 hours per day on activity	Of those who do undertake each activity, mean hours a day spent on each activity	
Time spent resting / recovering	38%	2.2	Severe and variable spend more time resting
Time spent on hobbies	38%	2.0	Mild spend more time on hobbies
Time spent on blister / wound care	9%	1.3	Significantly more time spent on blister / wound care for severe
Time spent on personal hygiene	20%	1.2	Severe and KEB spend more time on hygiene
Checking on pt during the night	41%	1.1	KEB checked on more in the night
Time spent on food prep	58%	1.0	KEB spend more time
Time spent getting dressed	28%	0.6	JEB, KEB and mild spend more time

Base All carers able to answer (76)

Q15 Please think about a typical day. On average, how much time do you spend on each of the following activities?

99

Carers of severe patients spend much longer on blister care and hygiene

Of those undertaking the	Total		EB 1	Гуре		Respond	ent Type	Severity				
activity, mean hours spent	TOTAL	SEB	DEB	JEB	КЕВ	Patient	Carer	Mild	Moderate	Severe	It depends	
N=	76	41	28	5	2	-	76	11	26	16	22	
Time spent resting / recovering	2.2	1.9	2.4	3.7	1.8		2.2	0.9	2.0	2.8	2.6	
Time spent on hobbies	2.0	2.2	1.9	2.0	0.3		2.0	4.3	1.4	2.9	1.5	
Time spent on blister / wound care including removing and applying dressings or bandages	1.3	1.2	1.5	1.8	0.6		1.3	0.9	1.0	2.4	1.1	
Time spent on personal hygiene – bathing, washing, going to the toilet, eye care	1.2	0.9	1.5	2.3	1.1		1.2	1.1	0.6	2.0	1.2	
Time spent checking on patient including during the night [Carer A only]	1.1	1.3	0.9	1.7	0.6		1.1	1.9	0.8	1.3	1.1	
Time spent on food preparation – e.g. if needing to puree food	1.0	0.9	1.1	1.0	1.7		1.0	1.1	0.7	1.2	1.1	
Time spent on getting dressed	0.6	0.6	0.6	0.9	1.1		0.6	1.1	0.5	0.7	0.6	

Base All carers able to answer (76)

100

Q15 Please think about a typical day. On average, how much time do you spend on each of the following activities?

Over 50% of carers for EB patients feel caring has put their life on hold and negatively impact their **mental health**; ³/₄ of carers feel they need more emotional support than is currently offered; respite polarising

To what extent do you agree or disagree with each of the following statements? (prompted)

% carers (n=103) People who care for people with EB need more emotional support 32% 42% than is currently on offer I try to hide how much caring for someone with EB 26% impacts((impacted) on me Caring for someone with EB has negatively impacted my mental 28% health I feel like when caring for someone with EB, my own life is(was) 27% 26% 20% on hold I have been reluctant to reach out for support when needed 18% 29% % current carers (n=90) I would be interested in opportunities for respite (a temporary break 17% 12% 17% from providing care for someone) ■ Agree strongly ■ Agree slightly ■ Neither agree nor disagree ■ Disagree slightly ■ Disagree strongly ■ Skip this question Carers of severe patients more strongly Carers for DEB & JEB patients more strongly agree they try to hide how much agree with all statements - most likely to feel their life is on hold this impacts them DEB JEB

Carers

N.B. Percentages <4% not labelled for clarity

19%

12%

16%

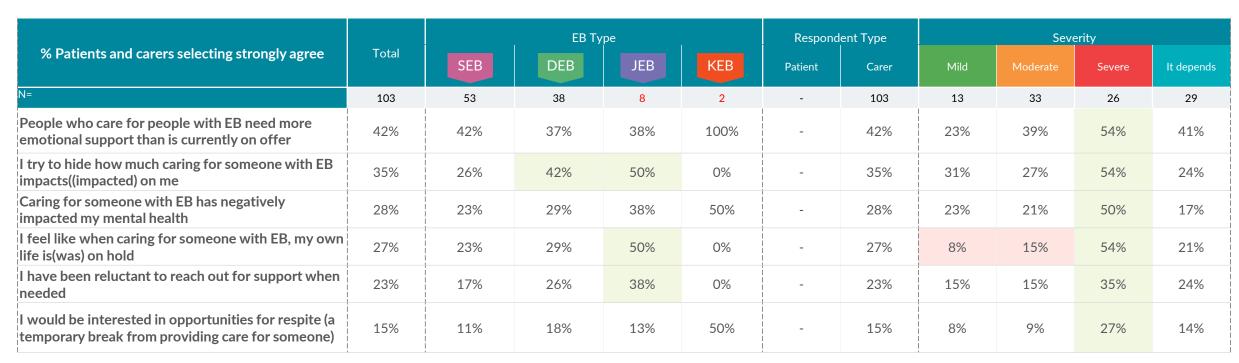
15%

15%

23%

Base 103 all carers

Q30 To what extent do you agree or disagree with each of the following statements?



Over 50% of carers for individuals with severe symptoms of EB feel their life

is on hold due to their caring responsibilities – more interest in respite care

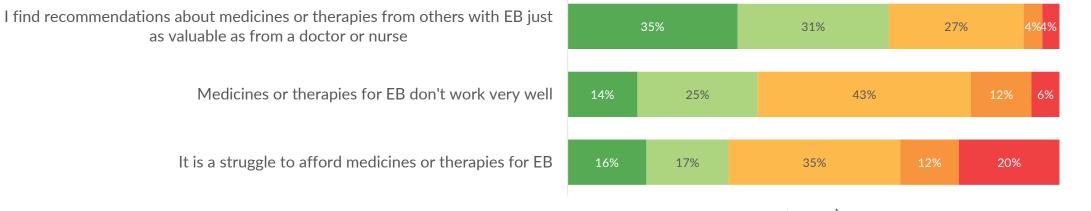
N.B. caution interpreting percentages with a low base

Patients Carers

EB treatments

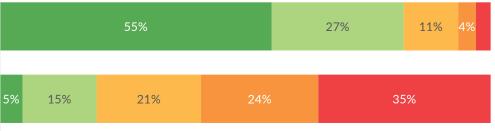
2/3 of patients and carers find recommendations from other EB patients as useful as advice from HCPs and 4/10 patients and carers feel medicines and therapies for EB don't work; 8/10 would like to know more about clinical trials, 8/10 say they would not be afraid to try new treatments

To what extent do you agree or disagree with each of the following statements about medicines or therapies for EB and symptom management? (prompted)



% patients and carers (n=318)

% patients and current carers (n=305)



I would like to know more about clinical trials for EB treatments that I could participate in / for the person I care for

I would be scared/scared for the person I care for to try a new treatment for EB in case it did not work

Agree strongly Agree slightly Neither agree nor disagree Disagree slightly Disagree strongly

N.B. Percentages <4% not labelled for clarity

Base 318 (215 Patients and 103 carers)

Q22 To what extent do you agree or disagree with each of the following statements about medicines or therapies for EB, and symptom management?

Moderate / severe more likely to feel that they struggle to afford medicines or therapies for EB and that these treatments aren't very effective



C.20% of patients with moderate to severe symptoms or seasonal symptoms feel that they struggle to afford medicines or therapies for EB and that these treatments aren't very effective, by comparison only 2% of patients with mild EB symptoms

			EB Ty	pe		Respond	ent Type	Severity			
%Patients and carers selecting strongly agree	Total	SEB	DEB	JEB	KEB	Patient	Carer	Mild	Moderate	Severe	It depends
N=	318	193	97	13	5	215	103	83	108	39	85
I find recommendations about medicines or therapies from other people with EB just as valuable as recommendations from a doctor or nurse	35%	37%	27%	38%	20%	31%	42%	30%	40%	26%	36%
Medicines or therapies for EB don't work very well	14%	15%	12%	23%	0%	12%	19%	2%	18%	18%	18%
It is a struggle to afford medicines or therapies for EB	16%	15%	21%	0%	40%	14%	19%	2%	19%	21%	20%
I would like to know more about clinical trials for EB treatments that I could participate in / I would like to know more about clinical trials for EB treatments that the person I care for could participate in	53%	59%	43%	46%	60%	54%	50%	42%	52%	49%	68%
I would be scared to try a new treatment for EB in case it did not work / I would be scared for the person I care for to try a new treatment for EB in case it did not work	4%	4%	5%	0%	0%	3%	7%	1%	6%	5%	5%

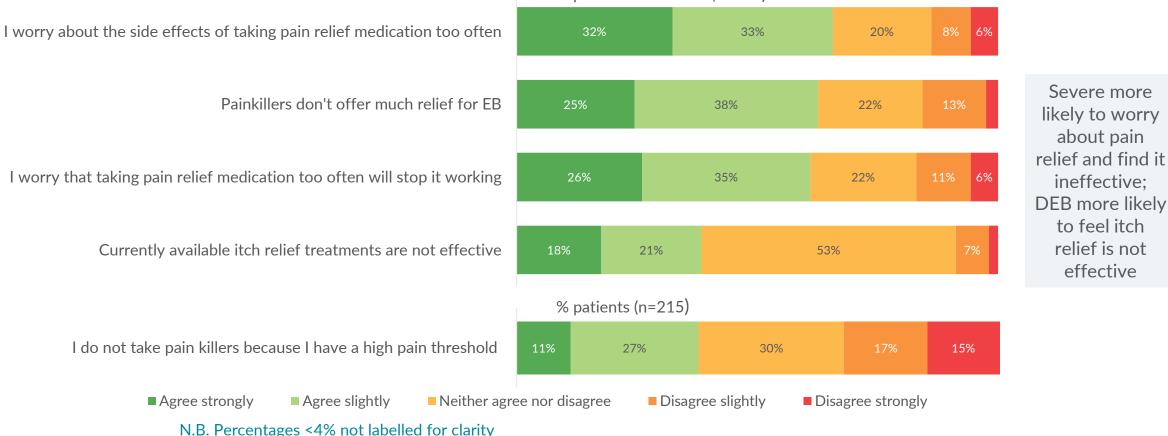
N.B. caution interpreting percentages with a low base

Base 318 (215 patients and 103 carers)

Q22 To what extent do you agree or disagree with each of the following statements about medicines or therapies for EB, and symptom management?

2/3 of patients and carers are worried about side effects of using pain killers too often but also suggest that painkillers don't offer much relief; 6/10 worry that using pain relief too often will stop it working

To what extent do you agree or disagree with each of the following statements about pain killers and itch treatment for EB? (prompted)



% patients and carers (n=318)

Base 318 (215 patients and 103 carers)

Q23 To what extent do you agree or disagree with each of the following statements about pain killers and itch treatment for EB? Carers: When giving your answers, please think about them in relation to how the person you care for uses or used painkillers and itch treatment.



Patients with variable or severe symptoms worry about the side effects of taking pain relief more frequently than patients with mild symptoms; 33% of patients with variable symptom severity also claim that painkiller don't offer much relief

			EB Ty	ре		Respond	ent Type	Severity			
% Patients and carers selecting strongly agree	Total	SEB	DEB	JEB	KEB	Patient	Carer	Mild	Moderate	Severe	lt depends
N=	318	193	97	13	5	38	215	83	108	39	85
I worry about the side effects of taking pain relief medication too often	32%	32%	31%	38%	20%	16%	29%	18%	33%	46%	38%
I worry that taking pain relief medication too often will stop it working	26%	25%	27%	38%	20%	21%	22%	14%	30%	41%	26%
Painkillers don't offer much relief for EB	25%	28%	18%	23%	0%	13%	23%	13%	25%	31%	33%
Currently available itch relief treatments are not effective	18%	12%	29%	8%	0%	24%	15%	13%	21%	21%	14%
I do not take pain killers because I have a high pain threshold	8%	8%	7%	0%	0%	16%	11%	17%	7%	3%	1%

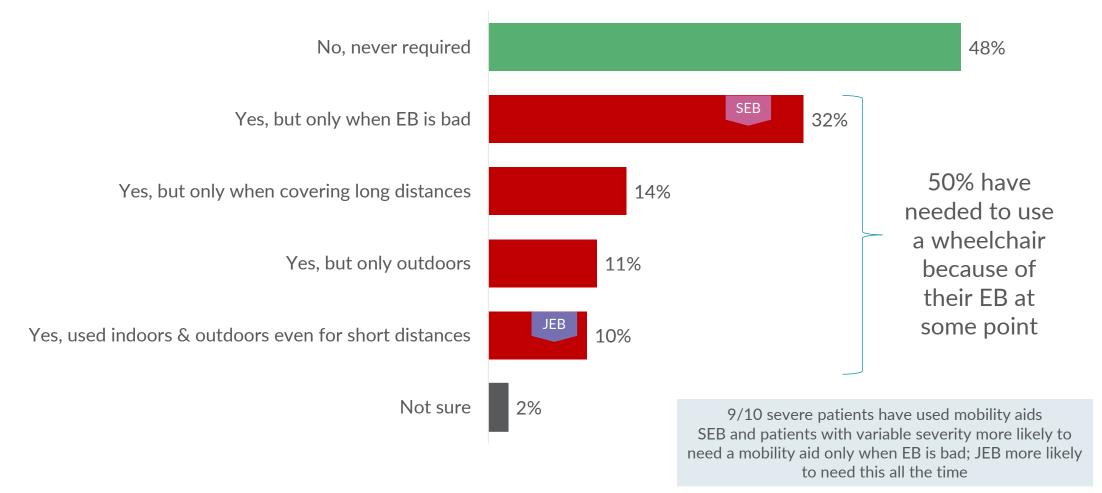
N.B. caution interpreting percentages with a low base

Base 318 (215 patients and 103 carers)

Q23 To what extent do you agree or disagree with each of the following statements about pain killers and itch treatment for EB? Carers: When giving your answers, please think about them in relation to how the person you care for uses or used painkillers and itch treatment.

50% have needed to use a wheelchair or mobility aid at some point

Have you ever needed to use a wheelchair, scooter or other mobility aid or equipment as a result of your EB?



Base 318 (215 patients and 103 carers)

Q23B Have you ever needed to use a wheelchair, scooter or other mobility aid or equipment as a result of your EB?

50% have needed to use a wheelchair or mobility aid at some point; rising to c.9/10 for severe patients

% Patients and carers selecting ontion		ЕВ Туре					lent Type	Severity				
% Patients and carers selecting option	Total	SEB	DEB	JEB	KEB	Patient	Carer	Mild	Moderate	Severe	It depends	
Total	318	193	97	13	5	215	103	83	108	39	85	
No, this has never been required	48%	44%	54%	27%	100%	54%	34%	72%	48%	9%	40%	
Yes, but only used when EB is bad	32%	41%	21%	0%	0%	33%	32%	19%	34%	26%	46%	
Yes, but only used when covering long distances	14%	15%	13%	18%	0%	11%	20%	7%	11%	23%	19%	
Yes, but only used when going outside (no indoor use)	11%	10%	13%	27%	0%	9%	14%	5%	10%	17%	13%	
Yes, used frequently / both indoors and outdoors / even for short distances	10%	8%	13%	36%	0%	5%	21%	0%	9%	46%	6%	
Not sure	2%	2%	1%	9%	0%	2%	1%	2%	2%	3%	1%	

N.B. caution interpreting percentages with a low base

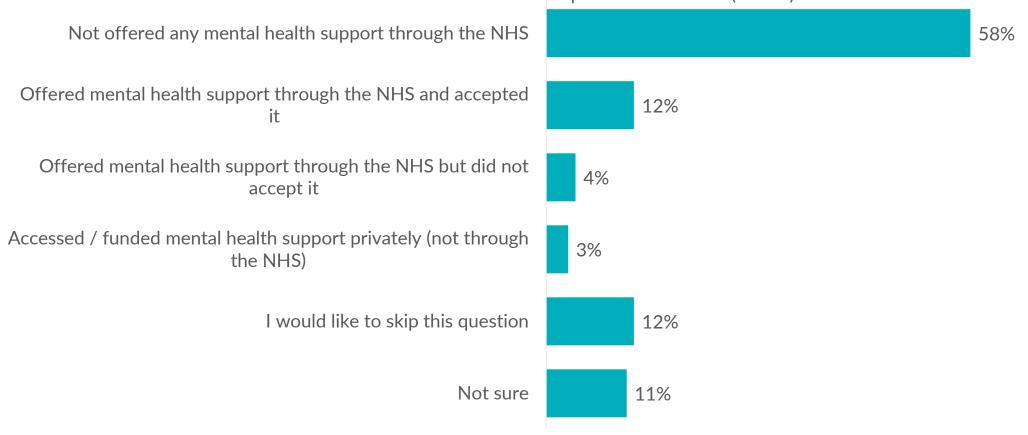
Patients Carers

Patients Carers

Impact of EB on mental health

Almost 60% of EB patients have not been offered any mental health support via the NHS; only 15% of EB patients have accessed any mental health support

Which of the following statements describe the mental health support you have been offered in relation to your EB? (prompted)



% patients and carers (n=318)

Base 318 (215 patients and 103 carers)

Q27 Which of the following statements describe the mental health support you have been offered in relation to your EB?



KEB patients most likely to be offered support, SEB and DEB less likely: 14% of patients with severe symptoms have turned down mental health support despite it being offered

N.B. caution interpreting percentages with a low base

3%

1%

5%

3%

3%

Q27 Which of the following statements describe the mental health support you have been offered in relation to your EB?

3%

0%

0%

5%

0%

4%

(not through the NHS)

Skin cancer, blisters on the soles of the feet and skin that blisters easily are most impactful on EB patient mental health, in addition to permanent partial sight/blindness and painful skin; those with bladder problems rank this as highly impactful on MH

Which symptoms have the greatest impact on EB patient mental health?

			1	, ,	experienced symptom
Skin cancer	25%	25%	17%	33%	8%
Blisters on the soles of the feet	37%	12%	13%	38%	78%
Skin that blisters easily	15% 18%	13%		54%	90%
Permanent partial sight or blindness	14% 14%	14%	5	7%	2%
Painful skin	11% 14% 8	%	66%		69%
Fatigue	5% 7% 15%		73%		46%
Scalp blistering and hair loss (scarring alopecia)	10% 10% 5%		76%		22%
Wounds that heal very slowly	7% 9% 7%		76%		63%
Problems with the bladder / passing urine	18% 5%		77%		8%
Nails that are thick or unformed	6% 6% 9%		79%		54%
Temporary partial sight or blindness	5% 11% 5%		79%		7%
Itchy skin	5% 7% 8%		80%		68%
Dental problems	4% 8% 8%		80%		33%
Fingers or toes fusing together	10% 6%		81%		10%
Blisters that you are unable to pop	9% 6%		82%		50%
Difficulty swallowing (dysphagia)	6% 6% 7%		82%		25%
Infected wounds	4% 7% 6%		82%		55%
Blisters on the palms of the hands	6% 10%		83%		60%
Blisters constricting or narrowing food pipe	11% 4%		84%		19%

■ 1st ■ 2nd ■ 3rd ■ Not ranked in top 3 Percentages <4% not labelled for clarity

Patients

% patients who have

% EB patients / carers with symptom

Carers

Base 291 patients/carers reporting symptoms who did not skip the question; base variable for each symptom

Q24 Which symptoms have the greatest impact on your mental health / Which symptoms do you believe have the greatest impact on the mental health of the person you care for? Please rate the top three that have the most impact on your / their mental health, selecting the most impactful first.

Some symptoms are less impactful on mental health – none of those with thin skin, chills/fever or breathing difficulty ranked it in top 3 symptoms impacting mental health

Patients Carers

Which symptoms have the greatest impa	ct on EB patie	nt mental health? % EB patients / carers with symptom	% patients who have experienced symptom
Blisters inside the mouth and throat	5% 7% <mark>3%</mark>	85%	48%
Fragile skin	4% 4% 6%	86%	76%
Skin erosion / breakdown of outer layer of skin	5% 3% 6%	86%	54%
Smell or odour from wounds	5% 4% 5%	86%	41%
Blistering in or around the genitals	5% 5% <mark>3%</mark>	87%	27%
Anal fissures	5% 3% <mark>4%</mark>	88%	32%
Fecal impaction	4% 4%	89%	16%
Difficulty sleeping	5% 4% <mark>2%</mark>	89%	43%
Webbing in the throat	3% 5% <mark>3%</mark>	90%	13%
Tiny pimple-like bumps (milia)	<mark>3%4%</mark>	91%	43%
Constipation	5% <mark>3%</mark>	91%	33%
Reflux	7%	92%	29%
Sensitivity to the sun	4%	94%	33%
Blistering and/or irritation in or around the eyes	<mark>3%</mark>	95%	22%
Painful passing of stools (poo)	<mark>3%</mark>	95%	34%
Leakage or discharge from wounds		96%	53%
Dry eyes		97%	34%
Skin that looks thin		100%	38%
Chills		100%	13%
Fever		100%	12%
Breathing difficulty		100%	7%
■ 1st	■2nd ■3rd	■ Not ranked in top 3 Percentages <3% not labelled for clar	ity

Base 291 patients/carers reporting symptoms who did not skip the question; base variable for each symptom

Q24 Which symptoms have the greatest impact on your mental health / Which symptoms do you believe have the greatest impact on the mental health of the person you care for? Please rate the top three that have the most impact on your / their mental health, selecting the most impactful first.

Blisters on the soles of the feet most impactful on MH for SEB and mild; severe most impacted by sight loss (1/2)

% Patients and carers selecting 1st place as most			EB T	уре		Respond	ent Type	Severity				
impactful symptom on mental health	Total	SEB	DEB	JEB	KEB	Patient	Carer	Mild	Moderate	Severe	It depends	
N= VARIABLE DEPENDING ON NO, OF PEOPLE WITH SYMPTOM	291	180	90	9	5	202	89	74	99	34	82	
Blisters on the soles of the feet	34%	44%	2%	0%	0%	39%	24%	53%	26%	15%	37%	
Skin cancer	23%	0%	38%	0%	0%	24%	20%	13%	33%	25%	0%	
Problems with the bladder / passing urine	15%	23%	0%	25%	0%	21%	0%	25%	20%	0%	0%	
Permanent partial sight or blindness	14%	0%	20%	0%	0%	0%	14%	0%	0%	33%	0%	
Skin that blisters easily	13%	18%	7%	0%	0%	13%	15%	10%	13%	13%	17%	
Painful skin	11%	11%	10%	9%	0%	8%	15%	5%	14%	6%	14%	
Blisters constricting or narrowing food pipe	10%	0%	12%	0%	0%	3%	17%	0%	14%	8%	10%	
Scalp blistering and hair loss	9%	0%	8%	25%	0%	8%	9%	0%	12%	4%	11%	
Wounds that heal very slowly	7%	7%	7%	9%	0%	6%	7%	5%	7%	12%	4%	
Nails that are thick or unformed	6%	3%	7%	0%	20%	6%	7%	17%	5%	0%	0%	
Itchy skin	5%	2%	9%	0%	0%	6%	3%	7%	5%	0%	6%	
Skin erosion / breakdown of outer layer of skin	5%	5%	6%	0%	0%	6%	3%	11%	3%	0%	5%	
Blisters inside the mouth and throat	5%	3%	3%	0%	60%	6%	2%	4%	5%	0%	9%	
Difficulty swallowing (dysphagia)	5%	0%	7%	0%	0%	7%	3%	0%	9%	4%	0%	
Temporary partial sight or blindness	5%	0%	0%	25%	0%	8%	0%	0%	0%	13%	0%	
Smell or odour from wounds	5%	4%	6%	0%	0%	3%	8%	0%	5%	6%	6%	
Anal fissures - sores, tears or ulcers	5%	3%	8%	0%	0%	6%	3%	15%	0%	0%	10%	
Blistering in or around the genitals	5%	7%	3%	0%	0%	8%	0%	9%	4%	5%	4%	
Fatigue	5%	3%	6%	0%	0%	7%	0%	8%	7%	3%	0%	
Difficulty sleeping	5%	6%	5%	0%	0%	7%	2%	5%	6%	4%	6%	

Base 291 patients/carers reporting symptoms who did not skip the question; base variable for each symptom

Q24 Which symptoms have the greatest impact on your mental health / Which symptoms do you believe have the greatest impact on the mental health of the person you care for? TOP RANKING SYMPTOM

Blisters on the soles of the feet most impactful on MH for SEB and mild; severe most impacted by sight loss (2/2)

Patients Carers

% Patients and carers selecting 1st place as most	Total		EB T	уре		Respond	ent Type	Severity				
impactful symptom on mental health	i otai	SEB	DEB	JEB	KEB	Patient	Carer	Mild	Moderate	Severe	It depends	
N= VARIABLE DEPENDING ON NO, OF PEOPLE WITH SYMPTOM	291	180	90	9	5	202	89	74	99	34	82	
Fragile skin	4%	2%	6%	8%	0%	3%	5%	2%	3%	5%	4%	
Dental problems, such as tooth decay or teeth falling out	4%	3%	4%	0%	20%	6%	0%	7%	5%	4%	0%	
Infected wounds	4%	5%	2%	10%	0%	2%	8%	4%	3%	3%	6%	
Blisters that you are unable to pop	3%	4%	0%	0%	0%	3%	2%	6%	2%	0%	2%	
Webbing in the throat	3%	0%	3%	0%	0%	5%	0%	0%	0%	0%	13%	
Fingers or toes fusing together	3%	0%	4%	0%	0%	0%	5%	0%	0%	6%	0%	
Fecal impaction	2%	0%	4%	0%	0%	3%	0%	0%	0%	0%	8%	
Blisters on the palms of the hands	1%	2%	0%	0%	0%	1%	2%	0%	3%	0%	0%	
Tiny pimple-like bumps (milia)	1%	3%	0%	0%	0%	2%	0%	0%	2%	0%	3%	
Dry eyes	1%	3%	0%	0%	0%	2%	0%	0%	0%	0%	4%	
Leakage or discharge from wounds	1%	0%	1%	0%	0%	1%	0%	0%	0%	0%	3%	
Painful passing of stools (poo)	1%	0%	0%	11%	0%	0%	2%	0%	0%	4%	0%	
Constipation	1%	0%	2%	0%	0%	2%	0%	8%	0%	0%	0%	
Reflux	1%	0%	3%	0%	0%	2%	0%	8%	0%	0%	0%	

Base 291 patients/carers reporting symptoms who did not skip the question; base variable for each symptom

Q24 Which symptoms have the greatest impact on your mental health / Which symptoms do you believe have the greatest impact on the mental health of the person you care for? TOP RANKING SYMPTOM. Zeros not shown.

C. 70% of EB patients feel their condition has a negative impact on their self-confidence and makes them feel like a burden to others; c. 50% of EB patients have experienced abuse or bullying due to their EB To what extent do you agree or disagree with each of the following statements? (prompted)

> % patients (n=215) EB has a negative impact on my self-confidence DEB 38% 10% 12% 33% 26% 39% 11% 16% SEB 11% 22% 17% 39% DEB 27% 31% 11% 16% 11% 27% 27% 18% 16% 25% 10% 27% 11% 35% 20% 15% 12% 18% 39% Skip this question Agree slightly Neither agree nor disagree Disagree slightly Disagree strongly

> > Severe patients more likely to struggle to leave the house, worry about symptoms getting worse and feel they are burden to others

I sometimes feel like I am a burden to others because of my EB

I have been reluctant to reach out for support when needed

I have never been truly honest with anyone else about how EB makes me feel

I often worry about my EB symptoms getting worse

I have experienced abuse or bullying because of my EB

I find it difficult to build or maintain relationships because of my EB

I find it hard to leave my house because of EB

N.B. Percentages <4% not labelled for clarity

Base 215 Patients

117

Agree strongly

Q26 To what extent do you agree or disagree with each of the following statements?

Patients

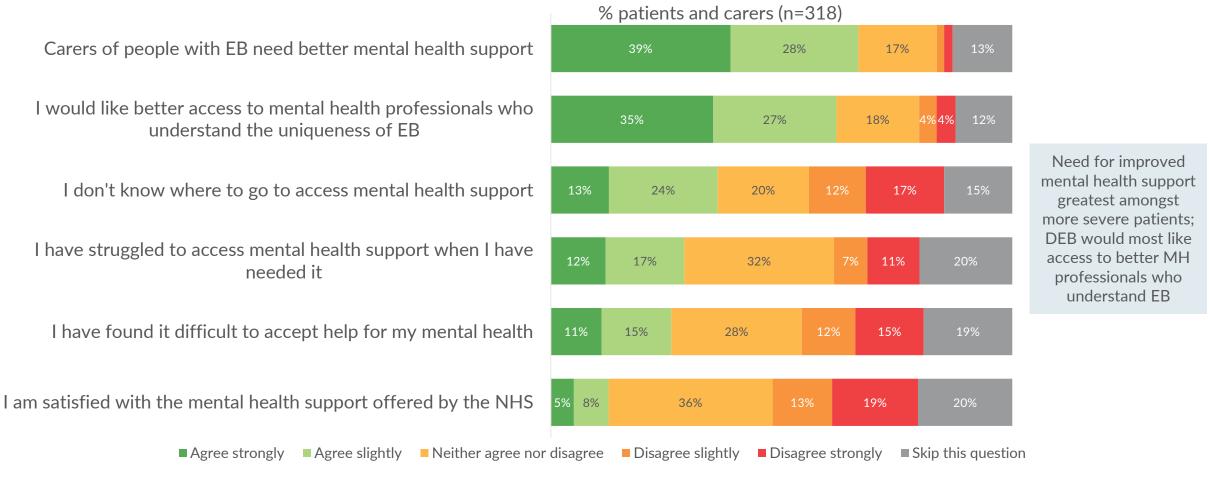
SEB patients more likely to feel like a burden because of their condition; DEB patients more likely to feel EB has impacted their self-confidence and have never been honest about how EB makes them feel; c. two thirds with severe EB find it hard to leave the house, worry about symptoms getting worse and feel they are a burden to others because of their EB

% Patients and carers selecting strongly agree	-	EB Type					ent Type	Severity				
% Patients and carers selecting strongly agree	Total	SEB	DEB	JEB	KEB	Patient	Carer	Mild	Moderate	Severe	It depends	
N=	215	140	59	5	3	215	0	70	75	13	56	
EB has a negative impact on my self-confidence	33%	28%	41%	20%	0%	33%	-	23%	41%	54%	27%	
I sometimes feel like I am a burden to others because of my EB	26%	33%	14%	20%	0%	26%	-	16%	25%	62%	32%	
I have been reluctant to reach out for support when needed	22%	18%	32%	0%	0%	22%	-	7%	32%	31%	23%	
I have never been truly honest with anyone else about how EB makes me feel	27%	23%	37%	20%	0%	27%	-	14%	32%	31%	38%	
I often worry about my EB symptoms getting worse	27%	20%	44%	60%	33%	27%	-	13%	29%	69%	34%	
I have experienced abuse or bullying because of my EB	26%	23%	31%	40%	0%	26%	-	23%	28%	46%	21%	
I find it difficult to build or maintain relationships because of my EB	11%	7%	19%	40%	0%	11%	-	3%	21%	31%	2%	
I find it hard to leave my house because of EB	10%	9%	17%	0%	0%	10%	-	1%	9%	62%	9%	

N.B. caution interpreting percentages with a low base

Only 13% of EB patients and carers are satisfied with mental health support offered by the NHS; c.65% believe carers need better mental health support and would like better access to MH support which understands the uniqueness of EB

To what extent do you agree or disagree with each of the following statements? (prompted)



N.B. Percentages <4% not labelled for clarity

Base 318 (215 patients and 103 carers)

Q28 To what extent do you agree or disagree with each of the following statements. CARERS: Please answer from your own perspective as a carer of someone with EB



Need for improved mental health support greatest amongst more severe patients; DEB would most like access to better MH professionals who understand EB

			EB Ty	ре		Respondent Type		Severity				
% Patients and carers selecting strongly agree	Total	SEB	DEB	JEB	KEB	Patient	Carer	Mild	Moderate	Severe	It depends	
N=	318	193	97	13	5	215	103	83	108	39	85	
Carers of people with EB need better mental health support	39%	38%	38%	31%	60%	38%	42%	25%	37%	69%	41%	
I would like better access to mental health professionals who understand the uniqueness of EB	35%	30%	45%	31%	40%	30%	46%	22%	37%	64%	33%	
l don't know where to go to access mental health support	13%	11%	16%	15%	0%	11%	17%	7%	13%	21%	13%	
I have struggled to access mental health support when I have needed it	12%	10%	16%	15%	0%	12%	13%	6%	9%	26%	14%	
I have found it difficult to accept help for my mental health	11%	7%	18%	15%	0%	9%	15%	8%	8%	26%	9%	
I am satisfied with the mental health support offered by the NHS	5%	3%	9%	8%	0%	6%	3%	4%	5%	8%	4%	

N.B. caution interpreting percentages with a low base

Base 318 (215 patients and 103 carers)

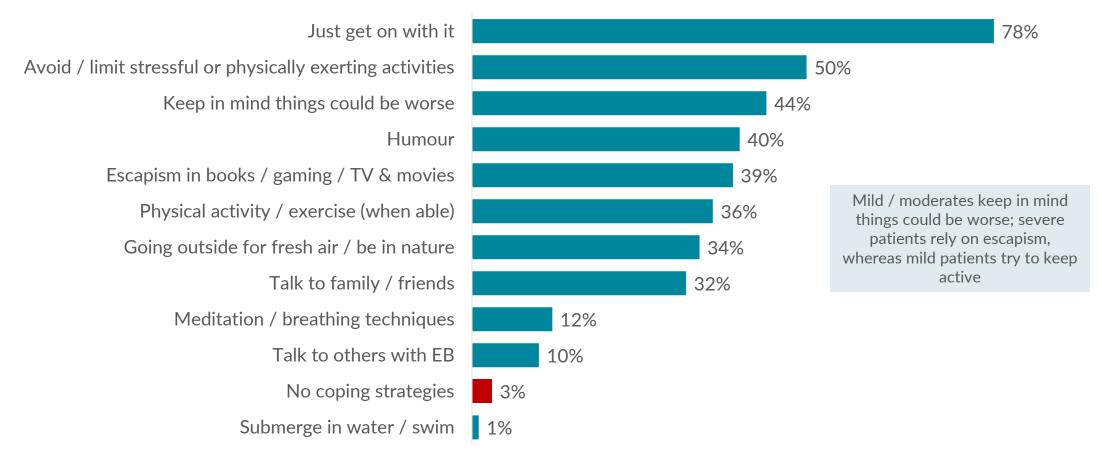
Q28 To what extent do you agree or disagree with each of the following statements. CARERS: Please answer from your own perspective as a carer

The majority of patients with EB tell themselves to "just get on with it" as a way to cope with their EB – positive coping mechanisms less evident

Which coping strategies, if any, do you use to cope with living with EB? (multicode)

Patients

Carers



The majority of patients with EB tell themselves to "just get on with it" as a way to cope with their EB; mild / moderates keep in mind things could be worse; severe patients rely on escapism, whereas mild patients try to keep active

% Detion to and cover colecting strongly agree		EB Type					lent Type	Severity				
%Patients and carers selecting strongly agree	Total	SEB	DEB	JEB	KEB	Patient	Carer	Mild	Moderate	Severe	It depends	
Total	305	190	91	10	5	215	90	83	106	30	84	
Just get on with it	78%	76%	81%	90%	60%	81%	70%	84%	75%	73%	77%	
Avoid / limit activities or interactions that cause stress or are physically exerting	50%	53%	47%	40%	20%	51%	49%	48%	46%	53%	57%	
Keep in mind that things could be worse	44%	39%	54%	50%	40%	50%	29%	47%	51%	30%	37%	
Humour	40%	36%	47%	60%	20%	41%	38%	45%	39%	57%	32%	
Escapism in books / video games / TV and movies	39%	33%	52%	30%	0%	39%	39%	35%	42%	57%	33%	
Keep physically active / exercise when able to	36%	37%	38%	40%	20%	40%	28%	46%	38%	23%	31%	
Going outside to get fresh air / be in nature	34%	30%	40%	50%	60%	40%	22%	40%	36%	33%	26%	
Talk to family / friends	32%	31%	36%	30%	60%	33%	31%	40%	26%	40%	30%	
Meditation / breathing techniques	12%	13%	10%	10%	20%	15%	4%	12%	14%	7%	11%	
Talk to others with EB	10%	9%	10%	20%	40%	12%	7%	11%	12%	13%	6%	
Other (please specify)	3%	3%	4%	0%	0%	2%	6%	2%	1%	3%	6%	
No coping strategies	3%	3%	1%	0%	20%	3%	2%	2%	4%	3%	1%	
I would like to skip this question	2%	1%	3%	0%	0%	1%	2%	2%	3%	0%	0%	
Submerge in water / swim	1%	2%	0%	0%	0%	2%	0%	1%	2%	0%	1%	

Base 318 (215 patients and 90 current carers)

N.B. caution interpreting percentages with a low base

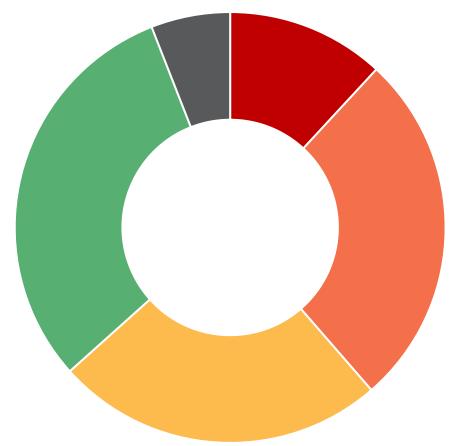
Q29 Which coping strategies, if any, do you use to cope with living with EB?

Patients Carers

Cost of living crisis

Two thirds of EB patients and their carers have been impacted by the cost of living crisis

To what extent, if at all, has the cost of living crisis impacted your life and your ability to manage your EB / To what extent, if at all, has the cost of living crisis impacted your life and your ability to support the person you care for with EB?



	% patients/carers
Severe impact	12%
Moderate impact	27%
Little impact	25%
No impact	31%
Not sure	6%

Patients Carers

0/ patients/askers

Impact less likely for mild EB and SEB, more likely for severe EB, younger patients and those from an ethnic minority

Base 305 (215 patients and 90 current carers)

Q39 To what extent, if at all, has the cost of living crisis impacted your life and your ability to manage your EB / To what extent, if at all, has the cost of living crisis impacted your life and your ability to support the person you care for with EB?

Cost of living crisis is less likely to have impacted mild EB and SEB patients / and their carers, and more likely for severe EB

% Patients and carers selecting option			EB Ty	'pe	1	Respond	ent Type	Severity				
% Patients and carers selecting option	Total	SEB	DEB	JEB	KEB	Patient	Carer	Mild	Moderate	Severe	It depends	
Total	Total	305	190	91	10	215	90	83	106	30	84	
It has had a severe impact	12%	9%	16%	10%	40%	13%	11%	1%	12%	33%	14%	
It has had a moderate impact	27%	24%	30%	30%	60%	24%	23%	16%	29%	43%	26%	
It has had a little impact	25%	22%	31%	40%	0%	34%	24%	24%	30%	13%	25%	
No impact	31%	38%	20%	20%	0%	24%	35%	52%	23%	7%	30%	
Not sure / not applicable	6%	7%	3%	0%	0%	5%	7%	7%	6%	3%	5%	

N.B. caution interpreting percentages with a low base

Patients Carers

Base 305 (215 patients and 90 current carers)

Q39 To what extent, if at all, has the cost of living crisis impacted your life and your ability to manage your EB / To what extent, if at all, has the cost of living crisis impacted your life and your ability to support the person you care for with EB?

Younger patients and those of an ethnic minority are more likely to have been impacted by the cost-of-living crisis

% Patients and carers selecting each			care of t centre?				nt Age			Patient Gender		Patient ethnicity		Location		
option	Total	Yes	No / not sure	Baby / toddler	Child	Teenager / young person	Adult 21-40	Adult 41-60	Adult 61+	Male	Female	White	Ethnic minority	North England	East & Midlands	South England
N=	305	184	121	15	38	23	89	78	62	103	198	279	24	44	80	119
It has had a severe impact	12%	14%	8%	7%	18%	17%	7%	17%	8%	14%	11%	10%	29%	16%	16%	8%
It has had a moderate impact	27%	34%	16%	47%	29%	26%	43%	19%	6%	28%	25%	26%	29%	32%	21%	27%
It has had a little impact	25%	28%	21%	40%	26%	26%	21%	23%	29%	26%	25%	26%	21%	14%	26%	29%
No impact	31%	23%	43%	7%	21%	30%	22%	38%	45%	27%	32%	33%	13%	32%	33%	30%
Not sure / not applicable	6%	2%	12%	0%	5%	0%	7%	3%	11%	5%	6%	5%	8%	7%	4%	5%

N.B. caution interpreting percentages with a low base

Patients Carers

Base 305 (215 patients and 90 current carers)

Q39 To what extent, if at all, has the cost of living crisis impacted your life and your ability to manage your EB / To what extent, if at all, has the cost of living crisis impacted your life and your ability to support the person you care for with EB?

Patients Carers

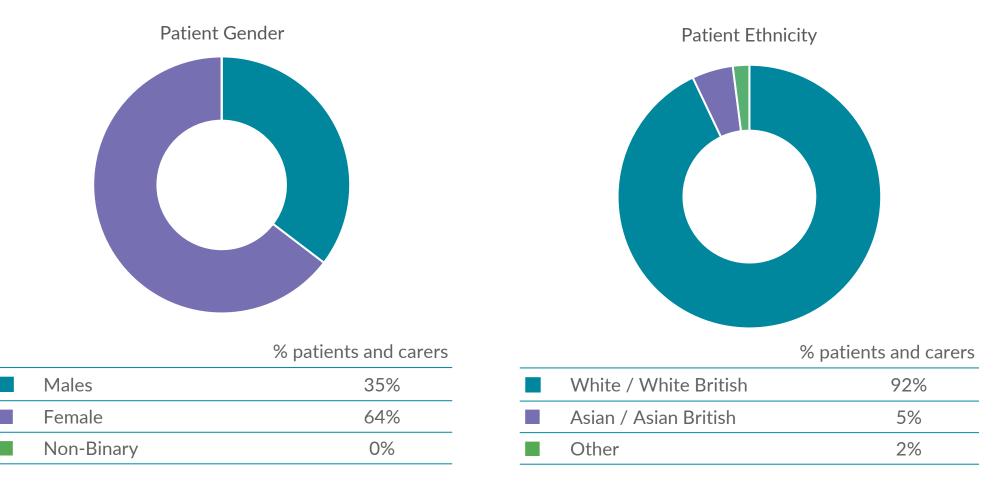
Patient Demographics

Patient Gender and Ethnicity

What gender do you identify as? / What gender does (did) the person you (were) supporting identify as? What is your ethnicity? / What is (was) the ethnicity of the person you are (were) caring for?

Patients

Carers

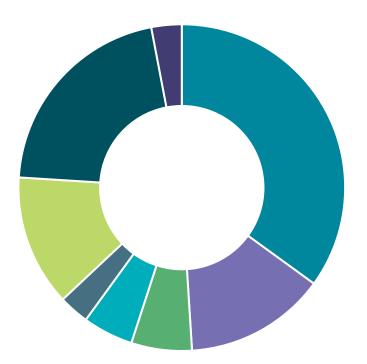


Base 318 (215 patients and 103 carers)

D4 What gender do you identify as? / What gender does (did) the person you (were) supporting identify as? D5 What is your ethnicity? / What is (was) the ethnicity of the person you are (were) caring for?

Patient Employment Status

What is your employment status? / What is (was) the employment status of the person you are (were) supporting (before they died)?



	% patients	SEB	DEB	JEB	KEB	Mild	Moderate	Severe	lt depends
Working full time	35%	41%	24%	17%	25%	45%	36%	0%	35%
Working part time	14%	11%	16%	17%	50%	17%	13%	4%	15%
Self employed	6%	6%	8%	0%	0%	8%	5%	12%	3%
Student	5%	4%	8%	17%	0%	6%	3%	8%	6%
Unemployed	3%	2%	4%	17%	0%	0%	2%	8%	3%
Unable to work due to health	ill 13%	8%	23%	17%	0%	0%	9%	68%	10%
Retired	21%	25%	14%	17%	25%	20%	27%	0%	24%
Stay at home parent / carer	3%	2%	4%	0%	0%	1%	5%	0%	3%

Patient Education Level

What is the highest level of education you have completed? / What is the highest level of education the patient you are (were) supporting has (had) completed?

	% patients	SEB	DEB	JEB	KEB	Mild	Moderate	Severe	lt depends
No qualifications	8%	0%	20%	16%	17%	32%	16%	12%	13%
O levels / CSE / GCSE / Level 1 or 2 awards and diplomas / IVQ Level 1 or 2	25%	0%	29%	10%	33%	25%	23%	4%	25%
A levels / Level 3 awards ar diplomas / INVQ level 3	nd 12%	0%	9%	15%	0%	10%	12%	0%	13%
Foundation degree / Certificate of higher education / Level 4 or 5 awards and diplomas / NVC Level 4 or 5	10%	0%	12%	10%	17%	11%	9%	20%	12%
Bachelor's degree / Gradua diploma / NVQ Level 6	te 22%%	75%	21%	32%	33%	13%	28%	48%	25%
 Higher degree e.g. Master's degree / Postgraduate certificate in education / Postgraduate diplomas and certificates / NV 	20%	25%	5%	14%	0%	8%	9%	16%	3%

Base 318 (215 patients and 103 carers)

D7 What is the highest level of education you have completed? / What is the highest level of education the patient you are (were) supporting has (had) completed?

Household Income

What is your total household income?



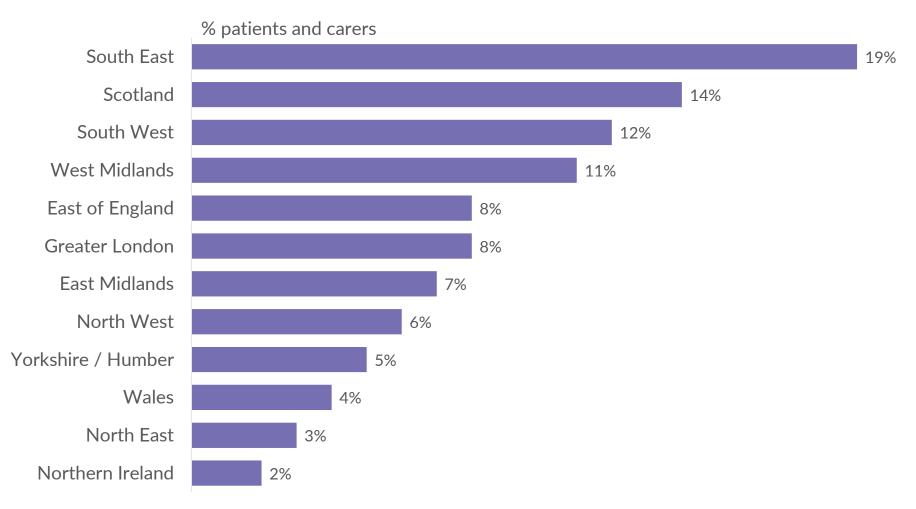
	% patients	SEB	DEB	JEB	KEB	Mild	Moderate	Severe	lt depends
Below 10,000	7%	6%	9%	8%	20%	20%	13%	20%	31%
10,000 to 20,000	14%	13%	12%	31%	40%	18%	47%	23%	15%
20,001 to 30,000	13%	13%	11%	15%	20%	8%	6%	6%	5%
30,001 to 40,000	13%	13%	14%	0%	0%	14%	16%	11%	10%
40,001 to 50,000	6%	8%	5%	0%	0%	16%	8%	14%	10%
Above 50,001	27%	28%	27%	8%	0%	15%	7%	19%	15%
Prefer not to say	20%	19%	20%	38%	20%	8%	2%	7%	10%

Where Patients Live

Where do you live? / Where does (did) the person (baby or toddler) you are (were) supporting live?

Patients

Carers



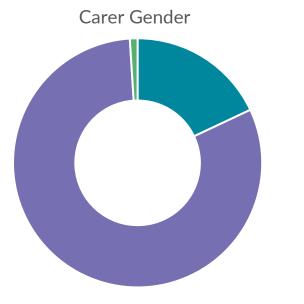
Base 318 (215 patients and 103 carers)

D9 Where do you live? / Where does (did) the person (baby or toddler) you are (were) supporting live?

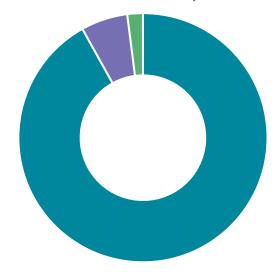
Carer Demographics

Carer Gender and Ethnicity

What gender do you identify as? What is your ethnicity?



Carer Ethnicity



	% patients and carers
Males	18%
Female	81%
Non-Binary	1%

Base 103 carers D10 What gender do you identify as? D11 What is your ethnicity?

% patients and carers

White / White British	91%
Asian / Asian British	6%
Other	2%

Carer Employment Status

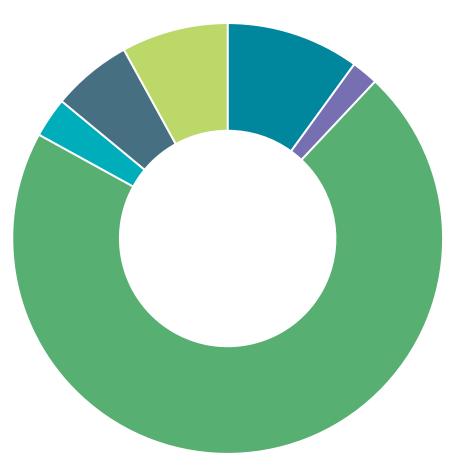
What is your employment status?

	% carers	SEB	DEB	JEB	KEB	Mild	Moderate	Severe	lt depends
Working full time	28%	28%	32%	25%	0%	31%	33%	35%	17%
Working part time	26%	28%	24%	13%	50%	46%	18%	19%	31%
Self employed	8%	2%	18%	0%	0%	15%	9%	12%	0%
Student	3%	4%	3%	0%	0%	0%	0%	4%	7%
	3%	2%	0%	13%	0%	0%	3%	4%	0%
Unable to work due to il health	ا 5%	6%	5%	0%	0%	8%	6%	0%	7%
Retired	14%	15%	16%	0%	0%	0%	18%	19%	10%
Stay at home parent / carer	13%	13%	3%	50%	50%	0%	9%	8%	28%



Carer's Relationship to Patient

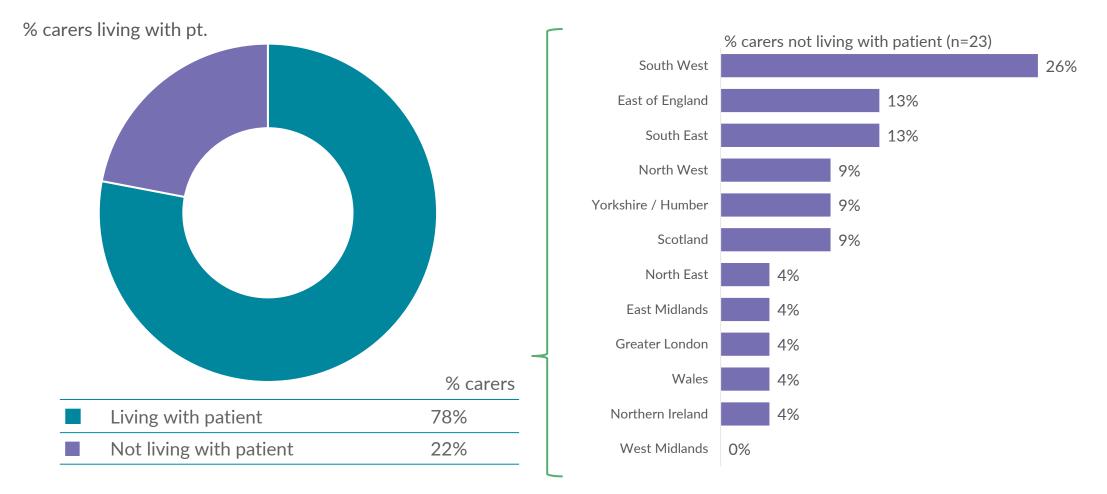
What is (was) your relationship to the person (baby or toddler) you (are) supporting(/ed)?



	% carers
My partner / spouse	10%
My parent / parent of my partner	2%
My daughter / son or the daughter/son of my partner	71%
My brother or sister	3%
My friend	6%
Another family member	8%

Where carers live

Do (Did) you live in the same household as the person you care(d) for? Where do you live in the UK?



Base 103 carers

D14 Do (Did) you live in the same household as the person you care(d) for? D15 Where do you live in the UK?

Carer Level of Education

What is the highest level of education you have completed?

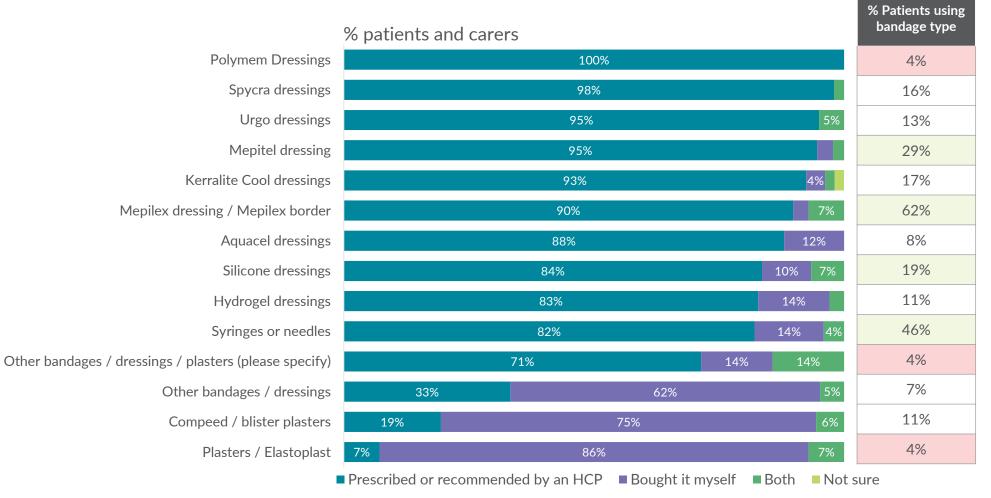
		% carers
	No qualifications	4%
	O levels / CSE / GCSE / Level 1 or 2 awards and diplomas / IVQ Level 1 or 2	19%
	A levels / Level 3 awards and diplomas / INVQ level 3	17%
	Foundation degree / Certificate of higher education / Level 4 or 5 awards and diplomas / NVQ Level 4 or 5	15%
	Bachelor's degree / Graduate diploma / NVQ Level 6	23%
•	Higher degree e.g., Master's degree / postgraduate certificate or equivalent	19%
	Prefer not to say	3%

Patients Carers

Patient Appendix

Most dressings are prescribed or recommended by HCP; patients self-purchase standard plasters

For each of the following you use to help manage your EB symptoms, please indicate below if this is prescribed or recommended by your doctor or nurse, or if you buy it yourself that is, this is something you use that your doctor or nurse has not specifically recommended to you). (prompted, multicode)



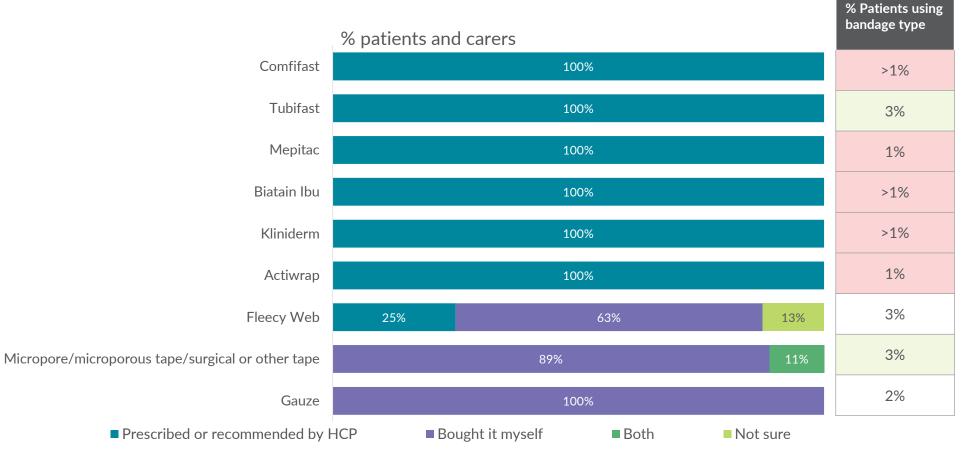
N.B. Percentages <4% not labelled for clarity

Base Variable by bandage/dressing type

Q20 For each of the following you use to help manage your EB symptoms, please indicate below if this is prescribed or recommended by your doctor or nurse, or if you buy it yourself (that is, this is something you use that your doctor or nurse has not specifically recommended to you)

20% of patients who use needles either purchase all or some of the needles necessary for their use: 10% of patients using Mepilex dressings purchase some or all of the dressings needed for their care

For each of the following you use to help manage your EB symptoms, please indicate below if this is prescribed or recommended by your doctor or nurse, or if you buy it yourself that is, this is something you use that your doctor or nurse has not specifically recommended to you). (prompted, multicode)



N.B. Percentages <4% not labelled for clarity

Patients

Carers

Base Variable by bandage/dressing type

Q20 For each of the following you use to help manage your EB symptoms, please indicate below if this is prescribed or recommended by your doctor or nurse, or if you buy it yourself (that is, this is something you use that your doctor or nurse has not specifically recommended to you)

GPs Derms

HCP Survey Detailed findings

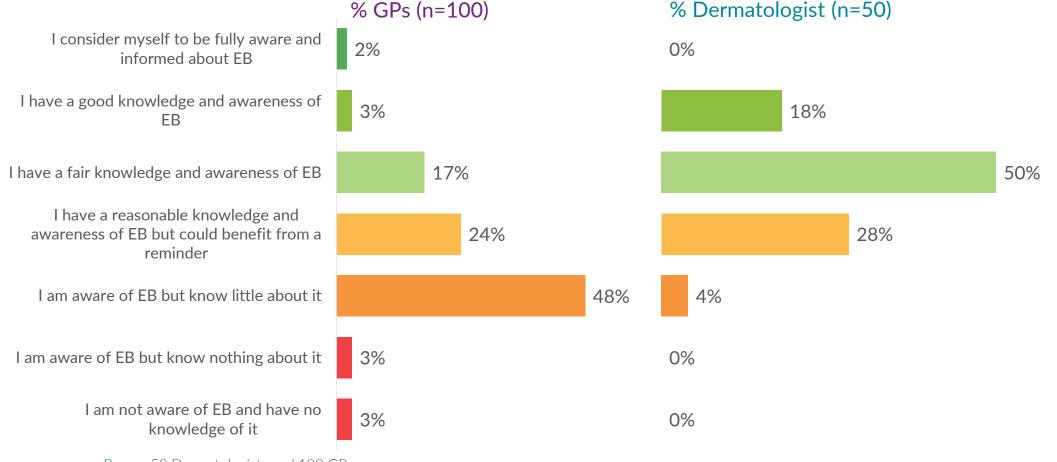
GPs Derms

HCP awareness of and attitudes to EB

The majority of HCPs have little to fair knowledge of EB; dermatologists have greater knowledge and awareness than GPs, but none consider themselves fully informed GPs

Derms

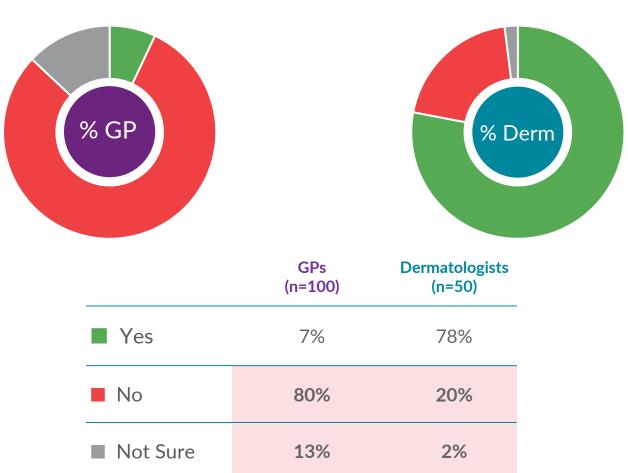
Which of the following statements best describes your understanding and awareness of EB? (prompted)



Base = 50 Dermatologists and 100 GPs

Q11: Which of the following statements best describes your understanding and awareness of EB?

93% GPs and 22% dermatologists don't know the details of their closest EB specialist service



Do HCPs know the details of their nearest EB specialist service? (prompted)

GPs

Derms

Base = 50 Dermatologists and 100 GPs

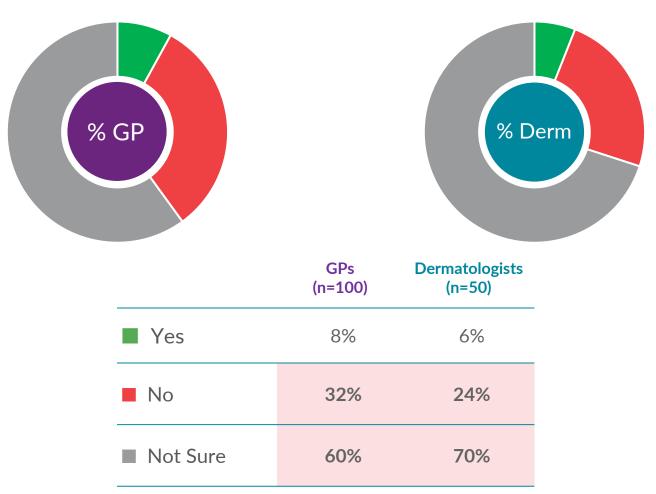
Q16 Do you know the details of your closest specialist EB service?

Only a minority of HCPs (7%) believe GPs can refer directly to EB services; a third of GPs and a quarter of dermatologists believe this is not possible

Can GPs refer directly to EB specialist services, even if the specialist service is outside the local referral area? (prompted)

GPs

Derms



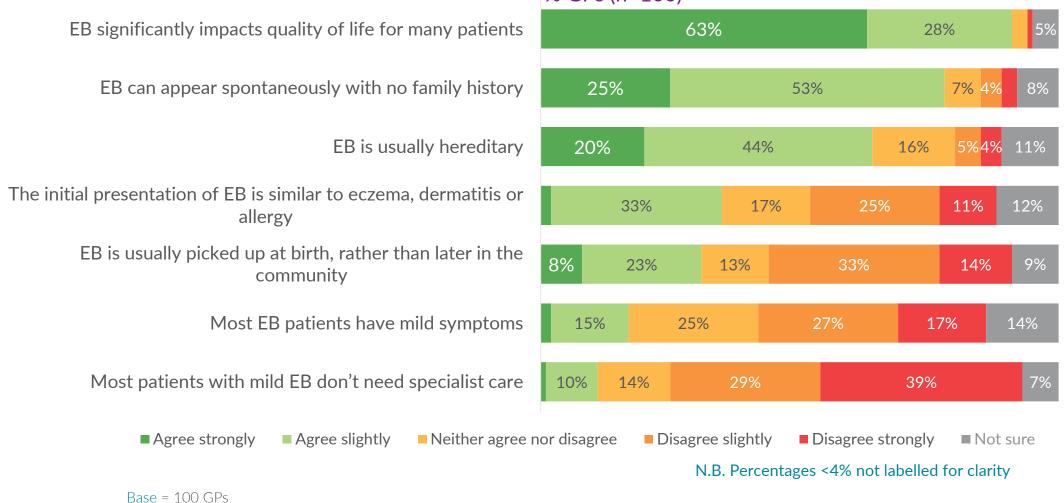
Base = 50 Dermatologists and 100 GPs

Q17 Can you / Can GPs refer directly to specialist EB services (i.e. without having to refer via a dermatologist (or paediatrician)), even if the specialist centre is outside the local referral area?

GPs appear to have fair awareness of EB disease characteristics, with 91% aware of impact on QOL and 78% aware of potential non-genetic presentation; however 35% agree initial presentation is similar to eczema / dermatitis / allergy, and 11% believe most mild patients don't need specialist care

To what extent do you agree or disagree with the following statements about EB? (prompted)

Q13: To what extent do you agree or disagree with the following statements about EB?



% GPs (n=100)

All dermatologists aware of EB impact on QOL; but a quarter agree EB presents similarly to eczema / dermatitis / allergy

To what extent do you agree or disagree with the following statements about EB? (prompted)

		0		/		
EB significantly impacts quality of life for many patients		76%		24%		
EB can appear spontaneously with no family history	48%			46%		
EB is usually hereditary		34%		44%		14% 8%0
Most EB patients have mild symptoms	4%	34%		26%	24%	<mark>6%</mark> 6%
EB is usually picked up at birth, rather than later in the community	6%	20%	14%	5	0%	10%
The initial presentation of EB is similar to eczema, dermatitis or allergy	6%	18%	16%	36%		22%
Most patients with mild EB don't need specialist care	4 <mark>%</mark> 10% 18% 34%		3	32%		
■ Agree strongly ■ Agree slightly ■ Neither agree r Base = 50 Dermatologists Q13: To what extent do you agree or disagree with the following		-		shtly ■ Disagree centages <4% not	e ,	■ Not sure clarity

% Dermatologists (n=50)

If specialist dressings are recommended, just over half of GPs would opt to prescribe similar generic dressings instead; c.half would always question requests for large quantities of dressings, and over half believe the cost of specialist dressings is not always covered by specialised commissioning

To what extent do you agree or disagree with each other following statements about prescribing and dispensing of specialist bandages, dressings and other items? (prompted) % GPs (n=100)

Recommendations for specialist dressings do not always include all the information I need to prescribe (e.g. manufacturer, dressing size, generic and brand name etc)

Local community pharmacists do not stock specialist dressings so patients have problems fulfilling their prescriptions

I am under cost pressures to prescribe generic dressings and bandages

Recommendations for specialist hypodermic needles do not always include all the information I need to prescribe

The cost of specialist dressings is not always covered by specialised care commissioning

If branded specialist dressings recommended for a patient, I would prescribe similar generic dressing rather than specific brand

If large quantities of specialist dressings are recommended for a patient I would always question this

If specialist dressings recommended for a patient are more expensive I would always question this

I will trial generic dressings and bandages I am familiar with, before considering prescribing specialist dressings

If specialist hypodermic needles are recommended for a patient, I am not sure I would be able to prescribe these

I would be concerned prescribing needles for lancing blisters due to concerns regarding costs / disposal

Agree strongly Agree slightly Neither agree nor disagree

Disagree slightly

Disagree strongly Not sure N.B. Percentages <4% not labelled for clarity

Base = 100 GPs

Q20 To what extent do you agree or disagree with each other following statements about prescribing and dispensing of specialist bandages, dressings and other items?

115. (pro	mpteu) /		-100)					
38%				45%		Ę	5%	7%
2	2%		51%			13%		9%
27%			45%			10%	10%	<mark>4%</mark> 4%
179	%	41%	6		18%	8%	1	L4%
19	9%	35%)	9%	9% <mark>4</mark> 9	<mark>%</mark>	24%	
4%	4	48%		12%	199	%	10%	7%
11%		36%		16%	22	%	12	<mark>% 3</mark> %
7%	30%		15%	2	5%	1	.8%	5%
7%	26%	1	L6%	269	%	16%	%	9%
9%	24%	1	.5%	26%	5	15%		11%
5%	21%	16%		33%		20	0%	5%

44% dermatologist strongly agree that GPs are not always happy to supply specialist dressings The majority of dermatologists also agree that specialist dressings may not be stocked by community pharmacies, that recommendations for them don't always include all information needed to prescribe, and that they are under cost pressure to prescribe generic dressings

To what extent do you agree or disagree with each other following statements about prescribing and dispensing of specialist bandages, dressings and other items? (prompted) % Dermatologists (n=50)

Local community pharmacists do not stock specialist dressings 26% 56% 12% so patients have problems fulfilling their prescriptions GPs are not always happy to supply specialist dressings 44% 14% 34% recommended by secondary care Recommendations for specialist dressings do not always include all the information I need to prescribe (e.g. 24% 52% 16% manufacturer, dressing size, generic and brand name etc) I am under cost pressures to prescribe generic dressings and 16% 48% 14% 12% 8% bandages The cost of specialist dressings is not always covered by 14% 10% 42% 14% 20% specialised care commissioning I will trial generic dressings and bandages I am familiar with, 10% 48% 18% 22% before considering prescribing specialist dressings Neither agree nor disagree Disagree slightly Agree strongly Agree slightly Disagree strongly ■ Not sure

N.B. Percentages <4% not labelled for clarity

Base = 50 Dermatologists

150

Q20 To what extent do you agree or disagree with each other following statements about prescribing and dispensing of specialist bandages, dressings and other items?

Derms

Over 2/3 of GPs identify several potential difficulties with the EB referral process including long wait times; ~90% of GPs also suggest that EB is misdiagnosed as other skin conditions due to lack of information and may cause delayed referral

To what extent do you agree with the following statements about the factors which may cause delays to diagnosis and referral or EB patients? (prompted)

There are likely to be long waiting lists for general derm referrals More information is needed for GPs about EB to avoid delayed referral There are likely to be long waiting lists for a paediatric dermatology referral There is delayed attendance in primary care due to EB being misdiagnosed as eczema There are likely to be long waiting lists for general paediatrician referral It is sometimes difficult to know where to refer a patient with a rare condition (EB) EB is too rare for most healthcare professionals to be familiar with It would be difficult to refer directly to EB specialist services If I saw EB symptoms, I may not initially recognise these as being EB There are likely to be long waiting lists for EB specialist services It's hard to tell EB from other onditions e.g. atopic dermatitis or skin infections I'm not sure which signs and symptoms would alert me to a case of EB EB patients and their families tend to manage their own care

Agree slightly

Agree strongly

Base = 100 GPs

73% 19% **4%**4% 43% 49% 63% 27% 5% 30% 59% 4% 55% 31% 4% 8% 36% 40% 8% 14% 30% 44% 10% 13% 38% 12% 32% 9% 7% 20% 50% 9% 5% 15% 29% 24% 16% 24% 8% 10% 42% 15% 22% 9% 33% 29% 10% 19% 37% 21% 15% 4% 21%

Disagree slightly Disagree strongly Not sure N.B. Percentages <4% not labelled for clarity</p>

Q21 To what extent do you agree or disagree with the following statements about the factors which may cause delays to diagnosis and referral of EB patients?

Neither agree nor disagree

% GPs (n=100)

Over 2/3 of dermatologists suggest that awareness of EB in both primary care and general dermatology is too low and paediatric referral waiting lists are likely to be long; three quarters feel EB is too rare for most HCPs to be familiar with and 2/3 are not sure GPs would recognised EB symptoms if they saw them

To what extent do you agree with the following statements about the factors which may cause delays to diagnosis and referral or EB patients? (prompted)

70 Derma	52%				~ (_	10/	
		38% 4%						
56%				32% <mark>4%</mark> 8				
	42%			44% 6% 69				
	50%			32%				
	6	0%		20%			6%	
34	4%		44%		<mark>4%</mark>	6 10%	8%	
32	2%		42%		1	18%	8%	
32	2%		42%		14	- <mark>% 4</mark> %	<mark>64%</mark> 4%	
8%		56%		10%		20%	6%	
6%	Ĺ	50%		20%		16%	6%	
10%		44%	1	4%	26	%	6%	
20%		32%	12%	5	24%		L0%	
16%		30%	269	%	10%	10%	8%	
8%	26%	14%		40%			12%	
20%		22%	3	36%		209	%	
4% 6%	26%		36%			28%		

% Dermatologists (n=50)

GPs do not have enough awareness of EB There are likely to be long waiting lists for general paediatrician referral More information is needed for GPs about EB to avoid delayed referral Greater awareness of EB is needed amongst dermatologists There are likely to be long waiting lists for a paediatric dermatology referral There is delayed attendance in primary care due to EB being misdiagnosed as eczema EB is too rare for most healthcare professionals to be familiar with Most GPs would not recognise EB symptoms if they saw them If a patient presented to me with EB symptoms, I may not initially recognise these as being EB EB patients and their families tend to manage their own care It is sometimes difficult to know where to refer a rare condition such as EB Most dermatologists have not received training on managing EB There are likely to be long waiting lists for EB specialist services It's hard to tell EB from other conditions e.g. atopic dermatitis or skin infections I'm not sure which signs and symptoms would alert me to a case of EB It would be difficult to refer directly to EB specialist services

Disagree slightly

Disagree strongly

■ Not sure

Base = 50 Dermatologists

Agree slightly

Agree strongly

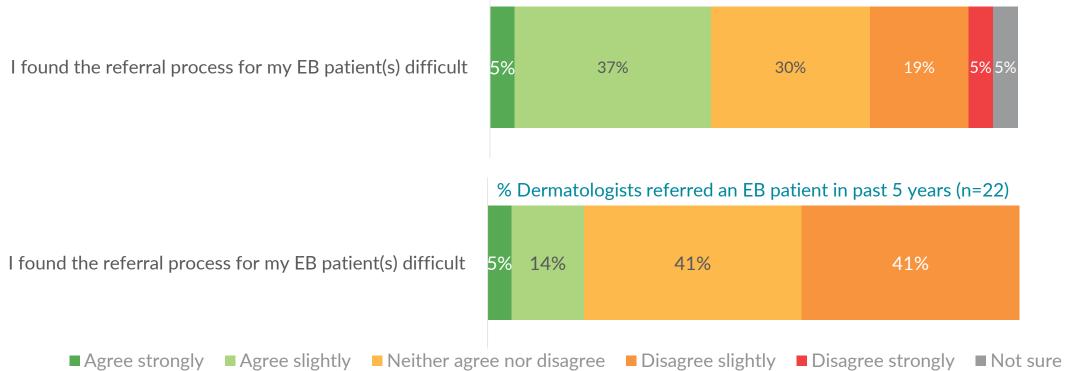
N.B. Percentages <4% not labelled for clarity

Q21 To what extent do you agree or disagree with the following statements about the factors which may cause delays to diagnosis and referral of EB patients?

Neither agree nor disagree

42% GPs and 19% dermatologists who have referred an EB patient in the last 5 years found the referral process difficult

To what extent do you agree with the following statements about the factors which may cause delays to diagnosis and referral or EB patients? (prompted)



% GPs referred an EB patient in past 5 years (n=43)

GPs

Derms

Base = 22 Dermatologists and 43 GPs

Q21 To what extent do you agree or disagree with the following statements about the factors which may cause delays to diagnosis and referral of EB patients?

Q22 To what extent do you agree or disagree with the following statements about management of EB patients?

Whilst over 4/5 GPs feel primary care should have a role in EB patient care and would be willing to take part in shared care arrangements, they would need to know more about EB before feeling comfortable to do this; just under half would be comfortable managing mild patients, but over 8/10 have reservations about managing more severe cases

To what extent do you agree with the following statements about management of EB patients (prompted)

Local secondary care should have a part in managing some elements of an EB patient's care I would need to know more about EB to consider managing some aspects of their care I would be willing to enter a shared care arrangement for an EB patient Local primary care should have a part in managing some elements of an EB patient's care The needs of EB patients are too complex to be met by primary care I would be comfortable managing patients with mild EB Most local healthcare professionals would not be willing to be responsible for elements of an EB patient's care The needs of EB patients are too complex to be met by local secondary care I would be comfortable managing all EB patients irrespective of severity Agree slightly Agree strongly

Base = 100 GPs

% GPs (n=100)



Disagree slightly

Neither agree nor disagree

N.B. Percentages <4% not labelled for clarity

Not sure

Disagree strongly

95% of Dermatologists agree that local secondary care should be involved in managing EB; most are happy managing mild, however, two thirds would not be comfortable with severe cases, and 52% agree the needs of EB patients are too complex for local secondary care to

meet To what extent do you agree with the following statements about management of EB patients? (prompted)

Local secondary care should have a part in managing some elements of an EB patient's care Local primary care should have a part in managing some elements of an EB patient's care The needs of EB patients are too complex to be met by primary care I would be willing to enter a shared care arrangement for an EB patient I would be comfortable managing patients with mild EB I would need to know more about EB to consider managing some aspects of their care The needs of EB patients are too complex to be met by local secondary care Most local healthcare professionals would not be willing to be responsible for elements of an EB patient's care I would be comfortable managing all EB patients irrespective of

severity

Agree strongly Agree slightly Neither agree nor disagree

N.B. Percentages <4% not labelled for clarity

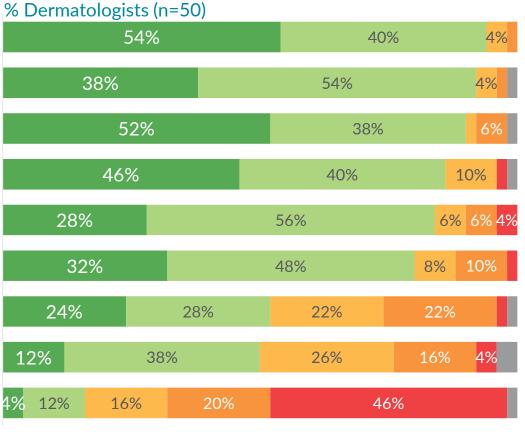
Disagree slightly

Not sure

Disagree strongly

Base = 50 Dermatologists

Q22 To what extent do you agree or disagree with the following statements about management of EB patients?



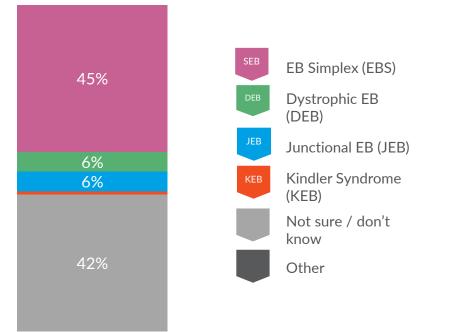
GPs Derms

HCP management of EB

Half of EB patients seen by GPs are undiagnosed presentations Only 58% GPs aware of the type of EB the patient they saw had

57% GPs have seen an EB patient in the last 5 years (mean 4 patients)

% EB patients with each type of EB / last 5 years (n=57 GPs)





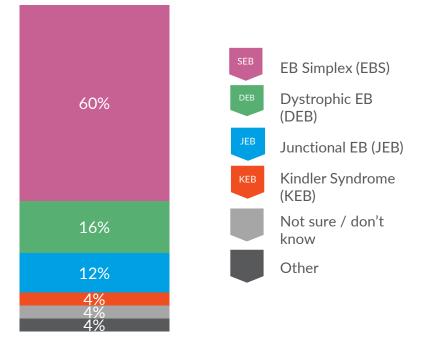
 % patients	GP
Undiagnosed patient presented with new EB symptoms seeking diagnosis	41%
Diagnosed EB patient seen for issues relating to their EB	22%
Diagnosed EB patient looking for (re)referral into tertiary care services	11%
Diagnosed EB patient seen for another issue unrelated to EB	17%
Undiagnosed patient with awareness of condition (e.g. due to own research or family history) seeking tertiary specialist care referral	9%

Base: 57 GPs & 40 dermatologists who have seen an EB patient / last 4 years (2 x outliers excluded) Q3 Of the__patient(s) you have seen with EB in the last 5 years, how many had each type of EB? Q4 How many were first seen under each of the following circumstances?

EB patients seen by HCPs are majority EBS; 38% were new, undiagnosed presentations

82% Dermatologists have seen an EB patient in the last 5 years (mean 5 patients)

% EB patients with each type of EB / last 5 years (n=97 HCPs)





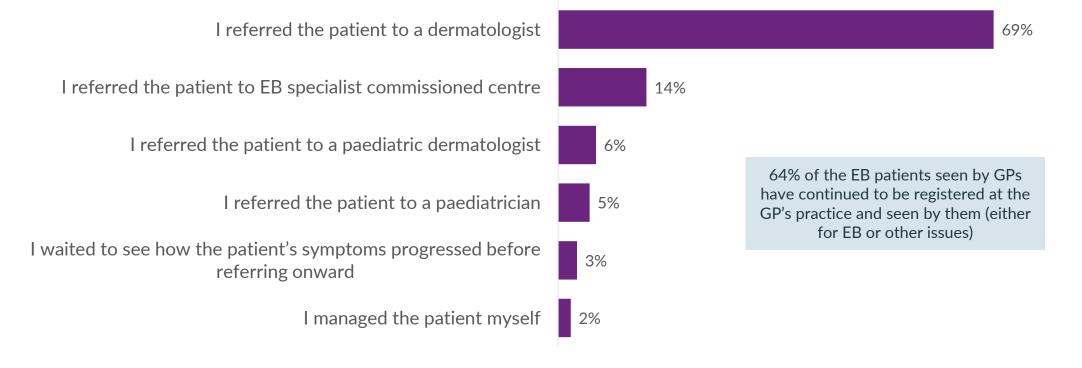
DERM

% patients	Derm
Undiagnosed patient presented with new EB symptoms seeking diagnosis	28%
Diagnosed EB patient seen for issues relating to their EB	33%
Diagnosed EB patient looking for (re)referral into tertiary care services	21%
Diagnosed EB patient seen for another issue unrelated to EB	7%
Undiagnosed patient with awareness of condition (e.g. due to own research or family history) seeking tertiary specialist care referral	10%

Base: 57 GPs & 40 dermatologists who have seen an EB patient / last 4 years (2 x outliers excluded) Q3 Of the__patient(s) you have seen with EB in the last 5 years, how many had each type of EB? Q4 How many were first seen under each of the following circumstances?

Two thirds of EB patients seen by GPs were referred to a dermatologist; only 14% were referred directly to an EB specialist centre

Of the patients presenting with new EB symptoms or seeking a referral when you first saw them – which of the following actions did you take? (prompted)





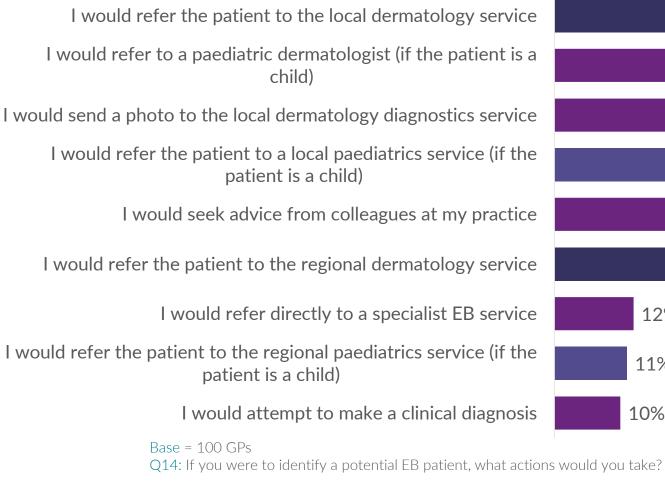
Base = 42 GPs with EB patient(s) in last 5 years either presenting with new EB symptoms or seeking a referral into tertiary specialist care (1 x outlier excluded) Q5 Of the___patient(s) you said you have seen with EB in the last 5 years who were either presenting with new EB symptoms or seeking a referral into tertiary specialist care when you first saw them – which of the following actions did you take?

Q6 Of the ___patient(s) you said you have seen with EB in the last 5 years how many continue to be registered at your practice and seen by you / colleagues, either for their EB or for other issues?

GPs

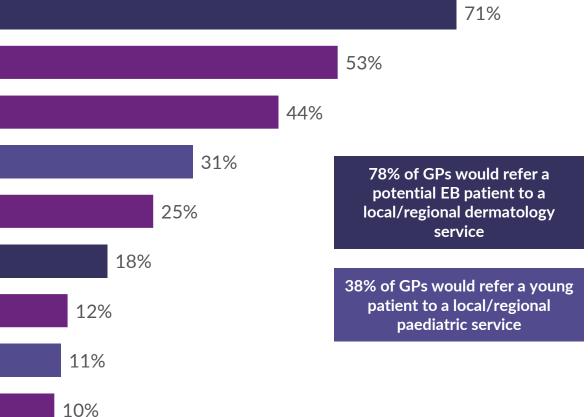
Only 12% of GPs would refer a potential EB patient directly to specialist EB services; the majority would refer to the local/regional dermatology service (78%) or paediatric dermatologist (53%)

If you were to identify a potential EB patient, what actions would you take? (prompted, multicode)



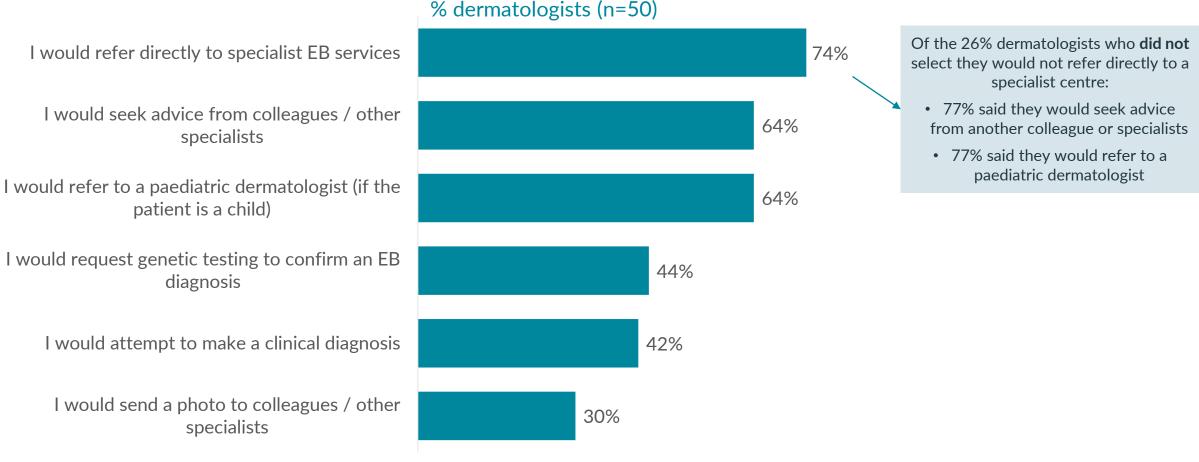
160

% GPs (n=100)



Three quarters of dermatologists would refer a potential EB patient directly to EB specialist services; two thirds would refer to a paediatric dermatology

If you were to identify a potential EB patient, what actions would you take? (prompted, multicode)

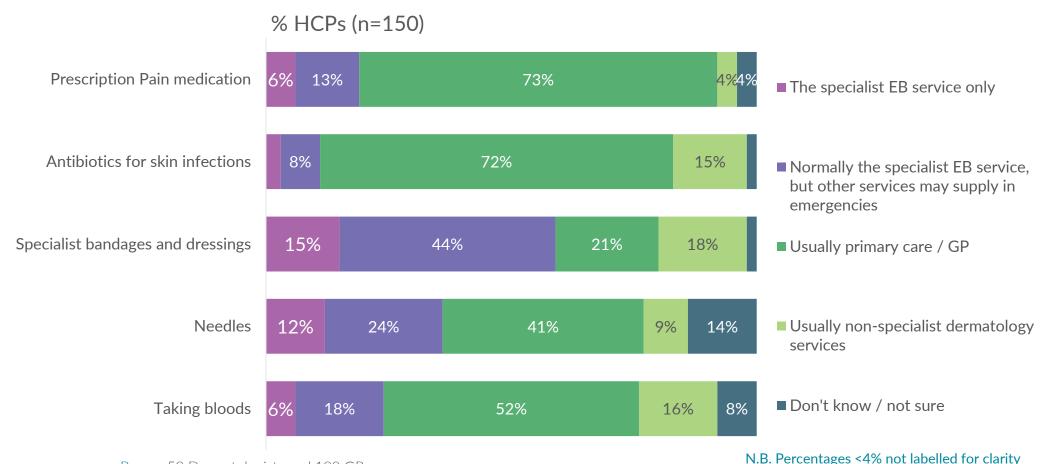


Base = 50 Dermatologists

Q15: If you were to identify a potential EB patient, what actions would you take?

C. three quarters HCPs say primary care would manage pain medication and antibiotics for EB patients, but 59% say specialist services normally manage specialist bandages and dressings; lack of certainty around who manages provision of needles and taking bloods

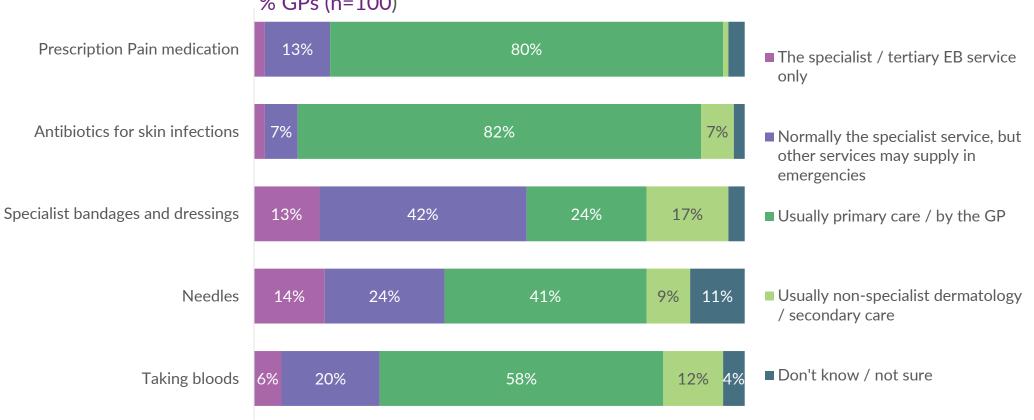
Who typically manages the following aspects of EB patients' care? (prompted)



Base = 50 Dermatologists and 100 GPs

Q8: Thinking about the ____EB patient(s) remaining under your care, who typically manages the following aspects of these patients' care? Q8B: Thinking generally about the patients you see in your practice who have rare or unusual dermatological condition that are usually seen by specialists / tertiary services, who typically manages the following aspects of these patients' care? 4/5 GPs say primary care would manage pain medication and antibiotics for EB patients, and 58% suggest they would take bloods, but lack of certainty around who would manage needles and specialist bandages; just over half suggest specialist care would manage bandages/dressings

Who typically manages the following aspects of EB patients' care? (prompted)



% GPs (n=100)

Base = 100 GPs

N.B. Percentages <4% not labelled for clarity

Q8: Thinking about the EB patient(s) remaining under your care, who typically manages the following aspects of these patients' care? Q8B: Thinking generally about the patients you see in your practice who have rare or unusual dermatological condition that are usually seen by specialists / tertiary services, who typically manages the following aspects of these patients' care?

Vs GPs dermatologists envisage a slightly greater role for non-specialist dermatology and specialist care in managing pain medication, antibiotics and taking bloods for EB patients; two thirds say specialist services will manage specialist bandages and dressings

Who typically manages the following aspects of EB patients' care? (prompted)



% dermatologists (n=50)

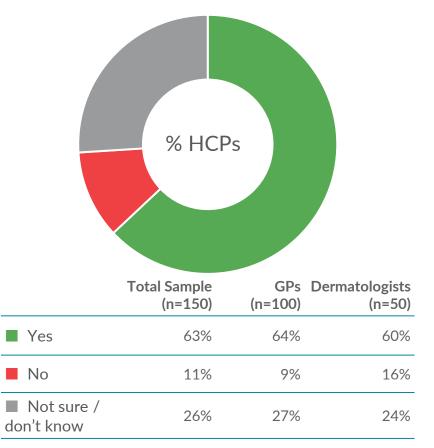
Base = 50 Dermatologists

N.B. Percentages <4% not labelled for clarity

Q8: Thinking about the___EB patient(s) remaining under your care, who typically manages the following aspects of these patients' care? Q8B: Thinking generally about the patients you see in your practice who have rare or unusual dermatological condition that are usually seen by specialists / tertiary services, who typically manages the following aspects of these patients' care?

Two thirds HCPs claim to have an approved dressings list / formulary; prescribing outside of this list is difficult for the majority, especially dermatologists (84%)

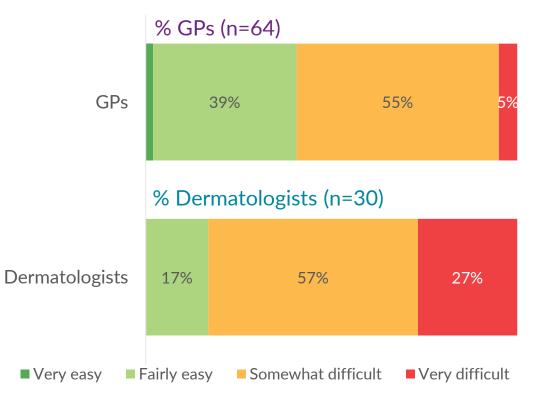
Do you have an approved dressings list / wound care / dressings formulary in your local area?



How easy or difficult would it be to prescribe dressings NOT on the dressings formulary if needed / when requested by specialist service?

GPs

Derms



Base = 50 Dermatologists and 100 GPs

Q18 Do you have an approved dressings list / wound care formulary / dressings formulary in your local area?

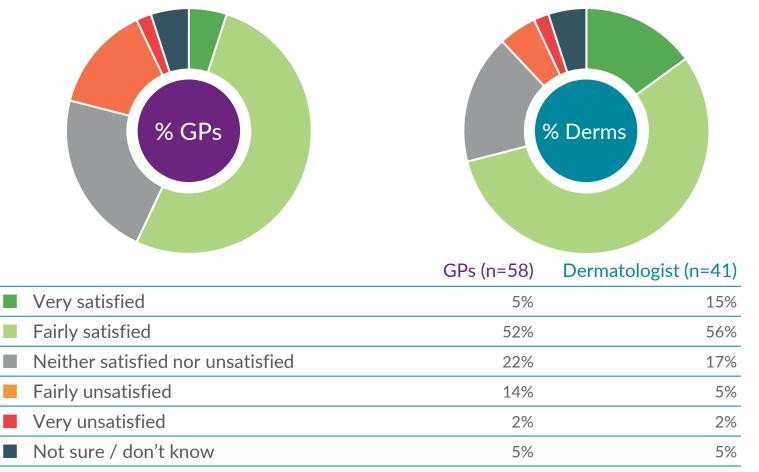
Q19 How easy or difficult would it be to prescribe dressings NOT on the dressings formulary if needed / when requested by specialist service?

Over half of HCPs are satisfied with the current healthcare provision available to EB patients – but few are very satisfied, room for improvement

Thinking about the ____ patient(s) you have seen with EB in the last 5 years, how satisfied have you been with the current healthcare provision available to EB patients? (prompted)

GPs

Derms

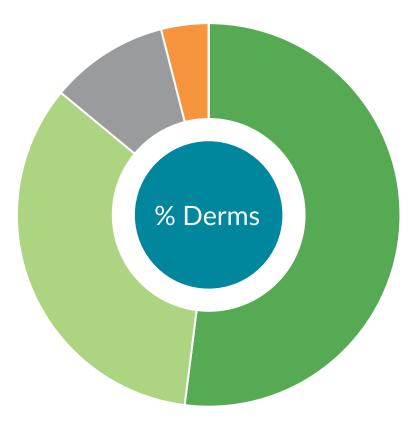


Base = All with EB patient in last 5 years (41 Dermatologists and 58 GPs)

Q10: Thinking about the ____ patient(s) you have seen with EB in the last 5 years, how satisfied have you been with the current healthcare provision available for EB patients?

86% of Dermatologists would feel positively towards the set up of an EB outreach clinic in their area

How positively or negatively would you feel towards the set up of an EB Outreach Clinic in your area? (prompted)



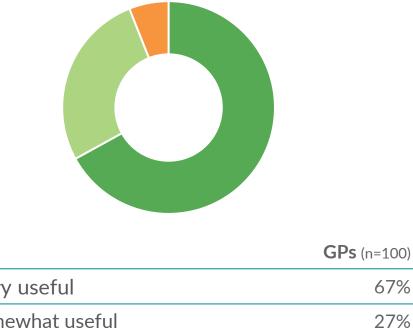
Dermatologist (n=50)Very positive52%Fairly positive34%Neither positive nor negative10%Fairly negative4%Very unsatisfied0%Not sure / don't know0%

GPs Derms

Communicating with HCPs about EB

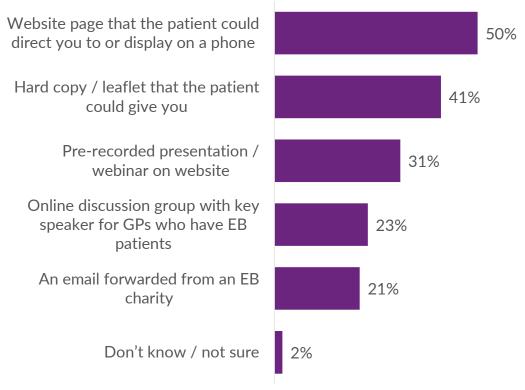
Two thirds of GPs would find a patient-directed pack of information very useful, with preference for this to be a website page the patient could direct them to or a hard copy / leaflet the patient could provide

How useful would GPs find a patient-directed GP pack of information about EB?



In what format would a patient-directed GP pack be best presented? (prompted, GPs selected up to 2)

% GPs (n=100)



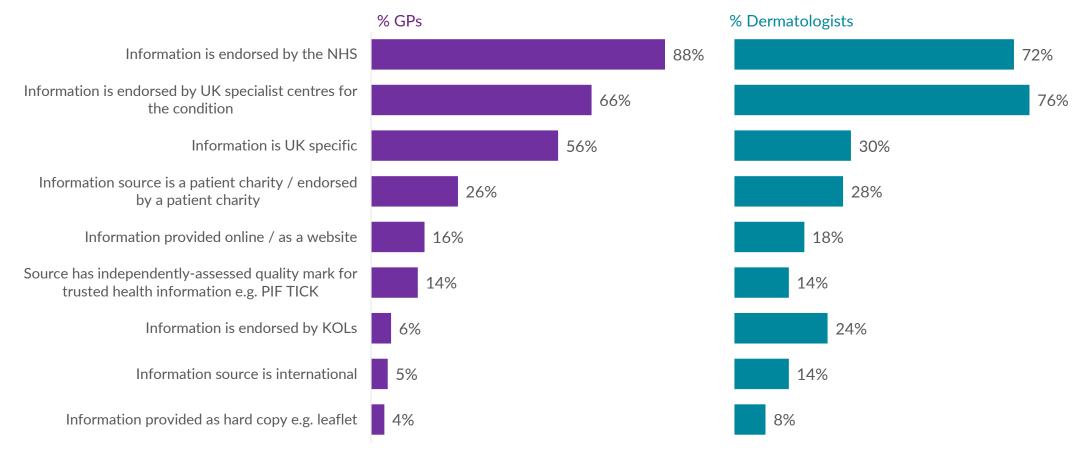
Very useful 67% Somewhat useful 27% Not very useful 6% Not useful at all 0%

Base = 100 GPs

Q28 If you had a patient with EB under your care, how useful would you find a patient-directed GP Pack of information about EB? Q29 And in what format would this patient-directed GP pack be best presented to you?

When searching for information about a condition such as EB, HCPs are more likely to use information which is endorsed by specialist centres & the NHS; independent endorsements e.g. PIF TICK would not have an impact for the majority

When you need to search for more information about a condition, for example EB, which of the following would make you more likely to use and trust the information you find? (prompted, multicode)



Base 50 Dermatologists and 100 GPs

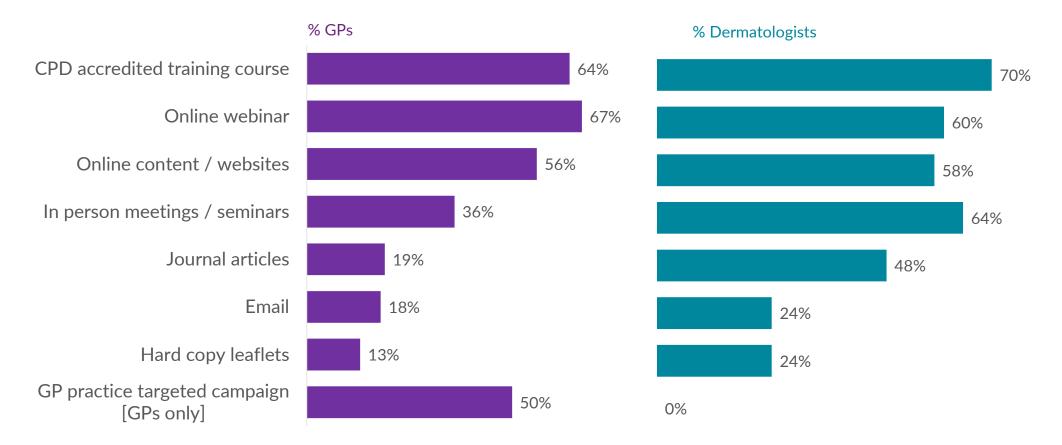
Q26 When you need to search for more information about a condition, for example EB, which of the following would make you more likely to use and trust the information you find?

HCPs are most likely to engage with EB information in the format of CPD accredited training courses and online webinars / content, and for dermatologists, in person meetings

If you were to receive further information or education about the condition of EB, which of the following formats of information would you be most likely to engage with? (prompted, multicode)

GPs

Derms



Base = 50 Dermatologists and 100 GPs

Q27 If you were to receive further information or education about the condition of EB, which of the following formats of information would you be most likely to engage with?

HCPs are highly positive towards being provided with different types of information about EB, with common signs/symptoms and when to involve tertiary /secondary care being most useful; dermatologists desire more specific information

If you were to come into contact with an EB patient in the future, how useful, if at all, would you find having been provided with the following information about EB?						
Common signs & symptoms of EB	76%		23%	83%	62%	
When to involve tertiary / secondary care	75%		21% 4%	76%	72%	
Information on clinical best practice guidelines for EB	72%	2	3% 5%	69%	78%	
Guidance re how to make referrals to specialist care	71%	2	25% <mark>3%</mark>	69%	76%	
Information on approved treatments / support that I may be required to prescribe	71%		29%		80%	
Different types of EB and how they present	62%	36%	36%		64%	
Advice about managing dressings for EB patients	61%	29%	11%	54%	74%	
Natural history of the disease	59%	38%	<mark>3%</mark>	60%	58%	
Information on treatments that may be prescribed by tertiary care	55%	30%	15%	46%	72%	
How long the waiting time is to be seen by the specialist EB service	55%	37%	7%	53%	58%	
Information about how the specialist EB service operates, who the patient can expect to see	54%	37%	8%	45%	72%	
Information about staff at the specialist EB service – e.g. names and contact details	53%	35%	9%	46%	68%	
Information on other healthcare professionals and services the patient is likely to require care from	53%	39%	7%	47%	64%	
Links to a charity / support group for EB patients	51%	38%	11%	47%	58%	
How primary care can provide holistic support	50%	42%	7%	51%	48%	
Genetics and inheritance of EB / family planning	49%	41%	10%	45%	56%	
Updates from specialist EB service about new treatment options / pipeline	46%	42%	11%	39%	60%	
Information on social care / non-healthcare support available for EB patients	42%	44%	13%	41%	44%	
A glossary of terms	35%	43%	19%	37%	32%	
Patient stories / patient histories	32%	51%	16%	29%	38%	
Base = 50 Dermatologists and 100 GPs	Very useful Somewhat useful Not very useful Not useful at all					

Base = 50 Dermatologists and 100 GPs

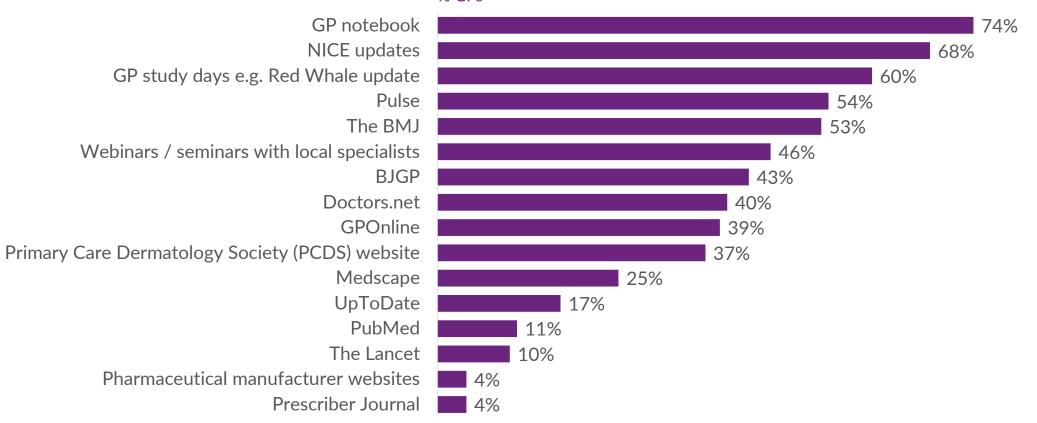
Q31 If you were to come into contact with an EB patient in the future, how useful, if at all, would you find having been provided with the following information about EB?

Derms

GPs

GPs most commonly use GP notebook, NICE updates and GP study days to stay up to date with developments in general practice; 37% use the Primary Care Dermatology website

Specific sources used to keep up to date with the latest developments in general practice (prompted, multicode)



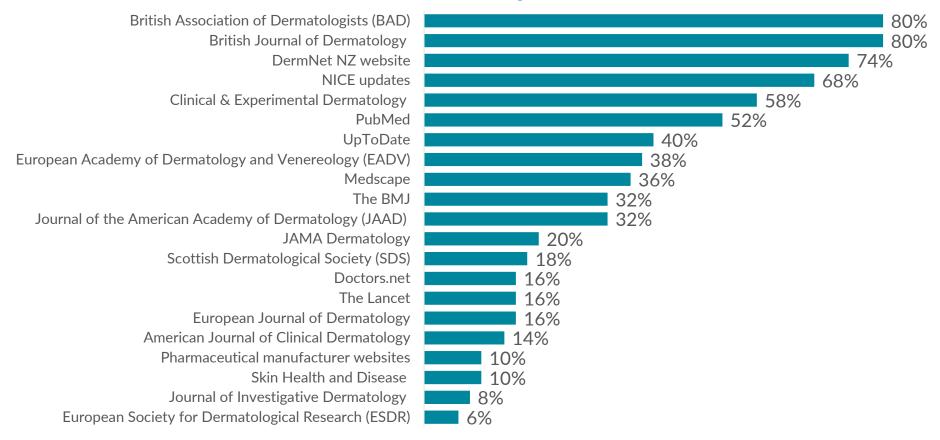
% GPs

Base = 100 GPs

Q24 What sources of information, if any, do you use to keep up to date with latest developments in dermatology / general practice?

Dermatologists most commonly use British Association of Dermatologists and associated journals, DermNet NZ website and NICE updates to keep up to date in dermatology DERM

Specific sources used to keep up to date with the latest developments in dermatology (prompted, multicode)



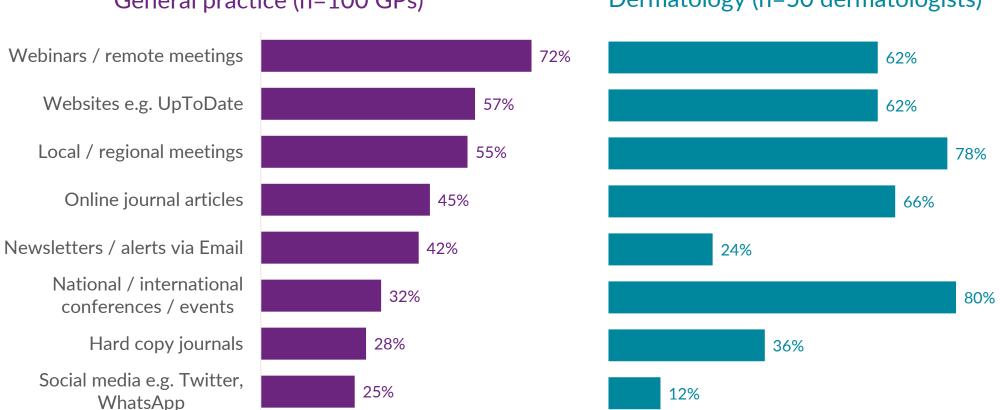
% Dermatologists

Base = 50 Dermatologists

Q24 What sources of information, if any, do you use to keep up to date with latest developments in dermatology / general practice?

The majority of GPs use webinars and websites to keep up to date in general practice, whereas dermatologists primarily use conferences/events and local/regional meetings

Channels most used to keep up to date with the latest developments in... (prompted)



General practice (n=100 GPs)

Dermatology (n=50 dermatologists)

GPs

Derms

Base = 50 Dermatologists and 100 GPs

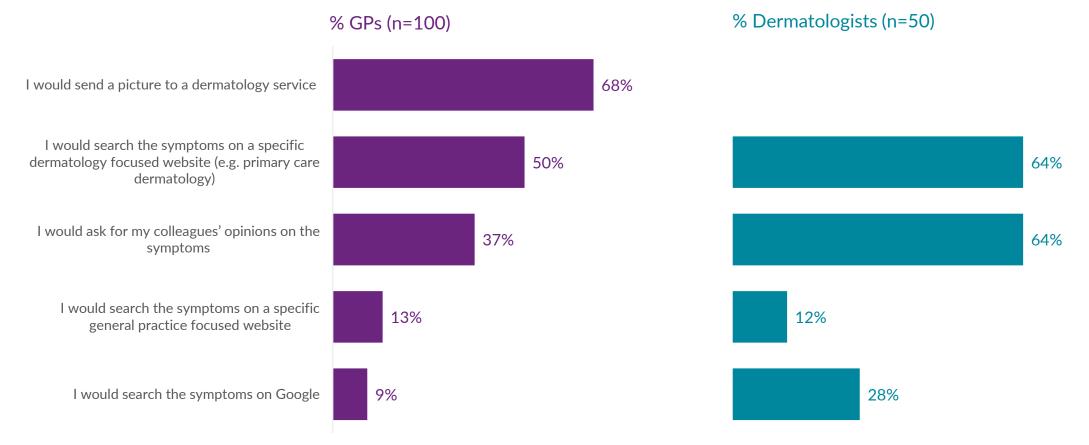
Q23 Via which channels do you most frequently keep up to date with the latest developments in dermatology / general practice?

If HCPs need to seek information about an unusual dermatological presentation, GPs would send a picture to dermatology or search a dermatology website; dermatologists would ask colleagues or search a dermatology website A quarter of dermatologists would search symptoms on Google

Where would HCPs first look for information about symptoms when presented with an unusual dermatological condition? (prompted, multicode)

GPs

Derms



Base 50 Dermatologists and 100 GPs

Q25 If a patient presented to you with an unusual dermatological condition where you were unsure of the diagnosis, where would you initially go to seek information about the symptoms?



THE BUTTERFLY SKIN CHARITY

Help stop the pain of EB