

# Pay attention to retention

A better understanding of contact lens dropout is revealing new insights into how to retain patients through a lifetime of lens wear. Jane Veys and Anna Sulley highlight opportunities to put the latest findings into practice

## KEY POINTS

- Dropout in new contact lens wearers occurs in the early stages of wear
- Practitioners are often unaware patients have lapsed or why
- For many dropouts, no alternative lens or strategy has been tried
- Confidence in lens handling is a key factor for new wearer success
- Good vision is especially important to new wearers of torics and multifocals
- Established wearers often adopt compensating behaviours
- Vision, comfort and convenience are key to retain presbyopes in contact lenses
- Lens choice should be driven by individual patient needs, which change with time



### The new wearer

Discomfort and dryness have long been considered the primary reasons for dropout but typically studies involve broad patient populations.<sup>3-10</sup> Two new studies focused on the reasons behind dropout among new wearers and whether the lens type worn and other factors influence retention.<sup>11,12</sup>

Both were multi-site, sponsor-masked and conducted in a representative range of UK practices. One was a retrospective chart review of 524 patient records<sup>11</sup> and the other a prospective fitting study to which 531 patients were recruited.<sup>12</sup> Each looked at new contact lens wearers over the course of the first year of wear and each identified potential opportunities to improve retention rates.

If there is any doubt that contact lens dropout could be a major challenge for you, your patients and your practice, look no further than the latest data on the UK market. In 2016, an estimated 800,000 people were new to contact lenses but almost as many – 700,000 – dropped out (Figure 1).<sup>1</sup>

When their lifetime value to your practice makes contact lens wearers an average of 60% more profitable than spectacles-only wearers,<sup>2</sup> the business implications of this 'leaking bucket' are also clear. In fact, dropout has an impact throughout your business, from wasted chair time to loss of satisfaction, confidence and loyalty among your patients.

Turning the challenge of dropout into an opportunity may require a targeted approach. New research findings are changing our thinking on the reasons for dropout and show that different strategies are needed to help retain patients in contact lenses at key moments during a lifetime of wear:

- When first fitted with contact lenses
- When an established contact lens wearer
- When reaching presbyopia.

This article will review what we now know about dropout at these key moments, how we can identify those at risk and how we can tailor our management strategies to support retention at each stage.



Figure 1. The UK contact lens market in 2016<sup>1</sup>

## The practitioners' view

When patient records were reviewed, the practitioner-reported overall retention rate at one year was 74%, or a dropout rate of 26%.<sup>11</sup> But nearly half of those who gave up in the first year did so in the first 2 months, and a quarter within the first month (Figure 2), showing that the early stages of lens wear are crucial to ongoing success.

The study found that new wearers aged under 45, those with higher sphere powers,

single-vision lens wearers, and those who bought lenses on a regular quarterly basis, were significantly more likely to still be in contact lenses after a year.

Retention rates were not related to gender, lens replacement frequency, material type or toric cylinder power. Type or location of practice had no influence on dropout but retention rates varied widely between individual practices, from 40% to 100%.

Practices that were more successful at retaining patients (>80% overall rate) tended to carry out more fittings per week (10.5 vs 6.3) than those that were less successful (<70%) and have a higher proportion of turnover from contact lenses.<sup>14</sup> They were also more likely to offer a full-time contact lens service.<sup>14</sup>

The reasons why new wearers discontinued show that dropout is more complex than we supposed. While handling and comfort were the most commonly cited performance-related reasons for discontinuing in new spherical lens

wearers, visual problems were the most common reason among new wearers of toric and, especially, multifocal lenses.

As expected, dropout due to handling problems decreased as experience increased. If lens performance was poor, cost also became an issue after 3 months or more of wear, although contact lens wearers are known to be health not price driven.<sup>14</sup>

So while discomfort and dryness are the most common reasons for dropout overall, these new findings suggest that vision problems among new wearers are – at the

very least – more of a factor than previously thought.

Crucially, practitioners taking part in this study were often unaware their patients had lapsed and for nearly one in three dropouts (32%) the reason for discontinuing was unknown.

And despite research showing 77% of lapsed wearers can be successfully refitted,<sup>6</sup> in only a minority of cases (29%) had patients had a further trial fitting, modified power or different lens type been tried before the patient dropped out.

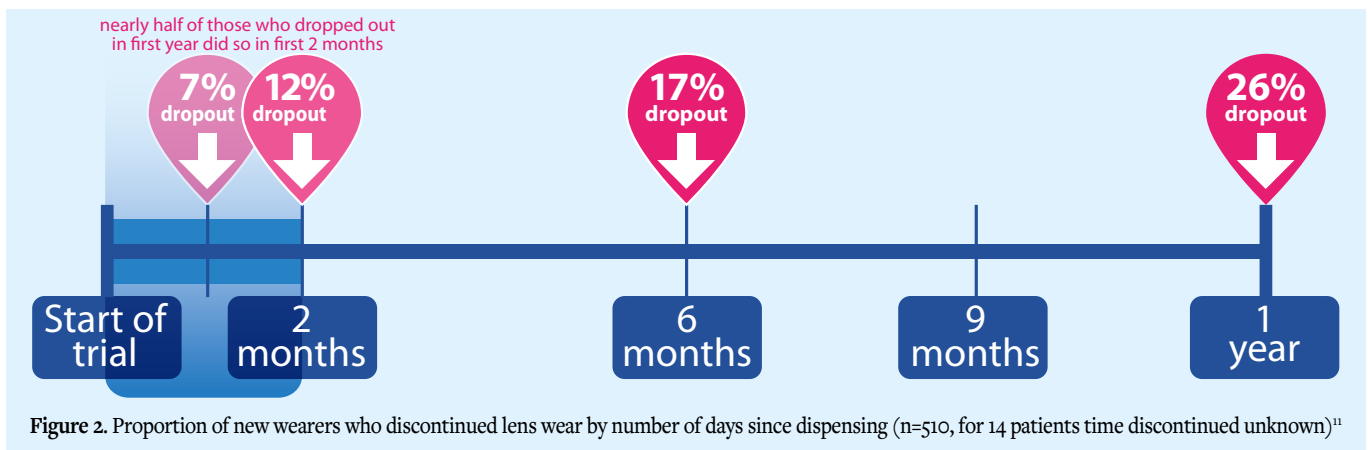


Figure 2. Proportion of new wearers who discontinued lens wear by number of days since dispensing (n=510, for 14 patients time discontinued unknown)<sup>11</sup>

### The patients' view

So were the findings consistent when new wearers were fitted then surveyed over the course of the first year rather than past records reviewed?

The overall one-year retention rate was similar (78%) and those with spherical refractions more likely to still be wearing lenses at the end of the year.<sup>12</sup> From this study, women were more likely to continue than men.

Poor vision was the primary patient-reported reason for discontinuation among toric and multifocal wearers, followed by poor comfort (Figure 3). As with the retrospective chart review, for sphere wearers poor vision was much less likely to be a factor.

Patients who wore lenses full time (≥4 days/week) were significantly more likely than part-time wearers (≤3 days/week) to still to be wearing them after a year. And those who routinely received their lenses by post were more likely to continue than if lenses were posted on request or collected from the practice.

Thus there are many opportunities to improve retention among those new to contact lenses. While both vision and comfort are key factors, confidence in lens handling and habit formation also play significant roles in this group, especially in the first few weeks of wear.

### Opportunities to improve new wearer retention

- Provide comprehensive novice support,<sup>15</sup> including follow-up calls to check on progress and reassure
- Choose products for optimum comfort that meet the patient's predominant needs
- Ensure the patient is happy with vision, especially with torics and multifocals
- Encourage habit formation: regular wear, regular purchase and convenient regular supply
- Recall and intervene before patients lapse and offer alternative products or strategies
- Monitor discontinuations and record reasons for dropout

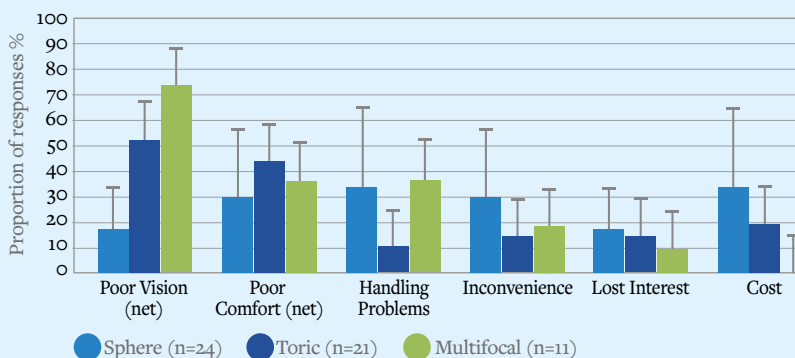


Figure 3. Patient reported reasons for discontinuing lens wear among new wearers (n=56) in prospective study.<sup>12</sup> Error bars show 95% confidence intervals

## 💧 The established wearer

Among established wearers, the most common reason for discontinuation is discomfort, reported by around half of those who lapse.<sup>3,4,7-10</sup> Maintaining comfort is therefore a key goal if patients are to benefit from a lifetime of contact lens use.<sup>16</sup>

Research is now revealing more about comfort over the cycle of lens replacement and daily wear that suggests the way patients are questioned about comfort is critical to understanding contact lens performance.

## + The silent sufferer

End-of-day comfort with widely prescribed monthly replacement lenses declines over the course of a month's wear.<sup>17</sup> As many as a half of these patients report being 'dissatisfied' or 'neutral' in the final week before lenses are replaced. In fact over two-thirds of patients using monthly lenses experience comfort-related issues.<sup>18</sup>

Most of these 'silent sufferers' resort to compensating behaviours – such as using rewetting drops, removing their lenses and taking breaks from lens wear – to get through a month of wear (Figure 4).<sup>18</sup> Most report being frustrated, annoyed and inconvenienced.<sup>17</sup> Yet crucially, many do not plan to tell their practitioner and, of these, most (85%) believe discomfort issues are a part of normal contact lens wear.<sup>18</sup>

Questioning about compensating behaviours, and asking whether lenses are as comfortable at the end of the replacement cycle as on day 1, can help elicit much more from those patients who may seem 'fine' but clearly are not.

Our understanding of the mechanisms underlying contact lens-related discomfort is also improving, leading to more effective management strategies.

The Tear Film & Ocular Surface (TFOS) International Workshop on Contact Lens Discomfort<sup>19</sup> proposed a progression of discomfort, from 'strugglers' who experience lens awareness and visual disturbance that, if not addressed, result in reduced wearing time, to temporary discontinuation and, ultimately, permanent dropout (Figure 5).

Many contact lens types are associated with reduced user comfort from mid-afternoon onwards.<sup>20</sup> Although declining comfort over the course of the day is also influenced by changes to the ocular environment,<sup>21</sup> there may be little the wearer can do to alleviate ambient conditions or avoid challenging visual tasks such as prolonged digital screen use.

Clearly it is important to elicit symptoms at the end of the day as well as monitoring overall comfort. Supplementing questions about number of hours a day and days a week the lenses are worn comfortably can identify 'strugglers'.

Asking patients to grade lens performance on a 0-10 scale will reveal a truer picture than simply asking: 'How are your contact lenses?' Use clinical signs and tests identified as correlating with contact lens discomfort,<sup>22</sup> and in-practice tools such as grading scales. Probing the type of discomfort experienced is also useful; dryness is a key aspect of lens-related discomfort that drives discontinuation.<sup>23</sup> Offering the comfort benefits of new technology such as ACUVUE® VITA™ and ACUVUE OASYS® 1 DAY, may help improve retention for these patients.

Research has also shown, for the first time, an association between ocular surface sensation and quality of vision.<sup>24</sup> Careful questioning about differences in visual quality through the day, in comparison with spectacles and for specific tasks, may therefore help identify 'strugglers' at risk of lapsing.

After discomfort, poor vision is consistently the next most common reason for dropping out among established wearers.<sup>6,9,10</sup> Changing visual needs – such as uncorrected astigmatism and changes to lifestyle or work – should always be addressed.

Although toric lens designs have advanced, astigmats remain over-indexed in the dropout population.<sup>6,25,26</sup> Toric contact lenses are still under-prescribed<sup>27</sup> and a very high proportion of astigmats not using torics – including previous dropouts – can be successfully re-fitted (92%).<sup>28</sup> Toric lenses have also been shown to deliver additional visual quality of life benefits to astigmatic wearers.<sup>29</sup>



Figure 4. Experience among the 2/3 of patients reporting comfort issues with widely prescribed monthly lenses (n=237<sup>17</sup> and 758<sup>18</sup>)



Figure 5. Progression of contact lens discomfort, adapted from TFOS<sup>19</sup>

## Opportunities to improve retention in established wearers

- Identify the patient's predominant needs and choose lenses that meet them
- Advise visual/lifestyle needs may change and alternative products are available
- Elicit full symptoms at each aftercare using detailed open questions
- Present and demonstrate new lens options if relevant for patient
- Remind about benefits of contact lens wear at each visit to maintain motivation
- Offer convenient options to meet patients' changing needs



## Opportunities to improve retention in presbyopes

- Inform 40+ year olds near vision changes over time and lenses are available to deal with this
- Tailor vision correction to task/occupation/lifestyle
- Provide both contact lenses and spectacles to meet the spectrum of patient needs
- Set realistic expectations and pre-empt adaptation issues
- Use the latest multifocal design and proven material technology
- Remember the importance of convenience and choice to these patients

## ✓ The patient-centred approach

For new and established wearers alike, personalised prescribing – where contact lens recommendation is centred on the patient's needs – is crucial to ongoing success.<sup>30</sup> This approach – matching the lens to the patient, not the patient to the lens – leads to a better understanding of why you are recommending a particular product that can improve long-term outcomes and help reduce dropout.

Resources are now available to identify the predominant patient need, such as a simple pre-fitting questionnaire. Each aftercare appointment then provides an opportunity to ensure that patient needs continue to be met. Remember also to record and remind your patients why they first started wearing contact lenses to help maintain their motivation.

Selecting the optimal contact lens for each patient is therefore crucial. The

TFOS workshop identified lens properties associated with improved comfort, such as friction, modulus and lens edge design.<sup>31</sup> Advances in lens materials and design mean that a very high proportion of lapsed wearers can be successfully and easily refitted with new lenses, whether spherical or toric.<sup>26</sup>

Finally, remember that dropout among established wearers can occur at any age. More than half of all dropouts are under the age of 40,<sup>32</sup> although the youngest wearers – aged 8-17 years – show very high retention rates, at 87% on average for experienced wearers.<sup>33</sup>

Since fewer males aged between 18 and 33 years wear contact lenses than those younger than 18 years, a different approach may be needed to retain them.<sup>34</sup> Factors such as contact lens care and inconvenience may be deterring males from continuing with lens wear as they mature.



## The emerging presbyope

Our understanding of dropout with advancing age is also improving and suggests a major opportunity to encourage retention among emerging presbyopes.<sup>11,12,35</sup> Among new wearers of multifocal contact lenses, the predominant patient-reported reason for dropping out is vision problems.<sup>12</sup>

However, new designs offering excellent visual outcomes have become available. Harnessing either improved designs or better fitting procedures can optimise vision and encourage retention.

A recent survey of 496 presbyopic patients aged 40 years and older again found poor vision (38%) and discomfort (34%) were the primary reasons for discontinuation.<sup>35</sup> But convenience was also a factor, cited by 20% of lapsed wearers. Notably, those who began contact lens wear after the onset of presbyopia were no more or less likely to discontinue than long-term wearers.

While visual challenges will always be greater with presbyopes, the launch of new products has brought increased confidence and success in multifocal fitting which bodes well for increased retention for this group. Materials that help overcome dryness issues, and more daily disposable options to address convenience and flexibility, may also help retain patients in contact lens wear.

Following the introduction of a new daily disposable with a proven material and innovative optics and design (1-DAY ACUVUE® MOIST MULTIFOCAL), practitioners showed growing confidence in fitting multifocals.<sup>36</sup> Prior to using the lens they ranked their success rate in fitting multifocals at 63%, but this increased to 78% after experiencing the lens. And most (65%) said they were more likely to move wearers into multifocals earlier than they had done prior to using this lens.

Presenting all the contact lens options, demonstrating the difference to the patient in real world situations and, again, tailoring your recommendation to individual needs are also key. Examples are combining progressive spectacles and multifocal contact lenses, using over-spectacles for specific tasks, or adding single-vision daily disposables for some activities where more suitable.

Early assessment is relatively unrepresentative of performance later on during multifocal contact lens wear and acuity-based measures are insensitive indicators of performance compared with subjective alternatives.<sup>37</sup> Allow a period of adaptation before recalling multifocal wearers, and ask them to score their subjective vision at distance, intermediate and near.

## Motivate and captivate

A deeper understanding of contact lens dropout and the underlying reasons why patients discontinue is informing our management strategies for keeping patients, whether new or established, young or presbyopic, in contact lenses.

Many strategies and in-practice tools are available that can easily

be implemented to encourage retention. Ensure vision is optimally corrected, wearers are confident in handling lenses, and their comfort experience is fully explored and addressed with new technologies. Meet the patient's predominant need from the outset and offer alternatives when needs change.

What motivates a person to start wearing contact lenses is unlikely to be what will make them stay in contact lenses across all life stages. Pay attention to retention and your patients can enjoy a lifetime of contact lens wear. And by improving practice efficiency, your business will benefit too.

### About the author

Jane Veys is Director, Global Professional Education and Anna Sulley is Associate Director, Global Strategic Medical Affairs at Johnson & Johnson Vision.

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