

Patient Experience Questionnaire

Please circle one answer for each question

1. Have you had a rigid sigmoidoscopy performed before?

Yes / No

- a. If so, how does your experience of LumenEye compare to your previous rigid sigmoidoscopy?

Much worse / Worse / The Same / Better / Much Better

2. I was very anxious about having the examination

Strongly disagree / Disagree / Neutral / Agree / Strongly agree

3. The LumenEye examination was more comfortable than expected.

Strongly disagree / Disagree / Neutral / Agree / Strongly agree

4. Please indicate by marking the line below with an 'X' how comfortable/uncomfortable you found the procedure

Comfortable |-----| Uncomfortable

5. I felt embarrassed/awkward during the procedure

Strongly disagree / Disagree / Neutral / Agree / Strongly agree

6. My doctor was gentle during the LumenEye examination

Strongly disagree / Disagree / Neutral / Agree / Strongly agree

7. I felt I had enough privacy when the LumenEye examination was performed

Strongly disagree / Disagree / Neutral / Agree / Strongly agree

8. Having a LumenEye examination in the community is more convenient than going to hospital for an endoscopy

Strongly disagree / Disagree / Neutral / Agree / Strongly agree

9. Given the option, would you rather have future investigations:

In the community / In hospital / No preference

10. I feel that there is a benefit from having early specialist review of the images from your LumenEye assessment before being seen in the hospital

Strongly disagree / Disagree / Neutral / Agree / Strongly agree

11. I am comfortable having images from my LumenEye examination shared with a specialist in the hospital

Strongly disagree / Disagree / Neutral / Agree / Strongly agree

12. I find it reassuring that my images have been reviewed by a specialist whilst awaiting an appointment in the hospital

Strongly disagree / Disagree / Neutral / Agree / Strongly agree

13. From my perspective, the LumenEye examination was necessary and could benefit my health

Strongly disagree / Disagree / Neutral / Agree / Strongly agree

14. If needed, I would be willing to undergo a further examination with a LumenEye in future

Strongly disagree / Disagree / Neutral / Agree / Strongly agree

15. What is your overall opinion of your experience with LumenEye assessment?

Very poor / Poor / Neutral / Positive / Very positive

Thank you for your time

LuCID Study
Case Report Form

Patients demographics

Patient Identifier: _____		Setting: _____ (inpatient/outpatient)	
Age: _____	Site: _____	Sex (M/F): _____	
GP Name: _____	Contra-indications	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Consent: Yes <input type="checkbox"/> No <input type="checkbox"/>			
Symptoms: __			
Established diagnosis Of IBD	Yes	No	(Crohns or UC)
Rectal Bleeding	Yes	No	
Altered bowel habit	Yes	No	
Mucus discharge	Yes	No	
Proctalgia	Yes	No	
Pruritis Ani	Yes	No	
Known Haemorrhoids	Yes	No	
Mass or prolapse	Yes	No	
Family history of cancer	Yes	No	
Other symptoms:			

Procedure details

Enema given? Home Clinic Inpatient

Repeat enema required? Yes No

Distance reached (cm): _____

Landmarks visualised:

Dentate line Lower rectal fold Upper rectal fold

Rectosigmoid junction Sigmoid

Number of air pumps delivered: _____

Quality of bowel prep Good Average Poor

(Good; more than 80% mucosa visible, Average; more than 50% mucosa visible, Poor; less than 30% mucosa visible)

Length of procedure (mins) _____

Normal study: Yes No (if no please answer below)

Lesions identified:

Tumour: _____ (describe features, size and location)

Adenoma _____ (size and location)

Inflammation present: Yes No

Foreign body: _____

Proctological disease: _____ (e.g. haemorrhoids, fissure, fistula)

Biopsy performed? Yes No

No of biopsies taken: _____

Confidence in suspected diagnosis: v. confident Reasonably confident Unsure unable to make diagnosis

Images captured? Yes No

Videos captured? Yes No

Remote consultation required? Yes No

No of attempts to connect _____

Delay in connection? Yes No

Overall experience of RTC? Excellent Good Average Poor

If poor, please state reasons

Post procedure

Were there any patient related complications? Yes No

If yes, please state _____

Were you able to reach a diagnosis? Yes No

If not, please state reason: _____

Patient outcome:

Discharged, no treatment Discharged with treatment started Referred to secondary care

Referred for further investigation Repeat appointment booked

Patient Reference ID _____

Name of endoscopist _____

GMC number _____

Grade _____

Signature _____

Chaperone name: _____

Chaperone signature _____

Name of virtual Proctor _____

PPE used? Yes No

Report completed? Yes No

GP letter sent? Yes No

Concern about Covid-19 transmission? Yes No

Device swabbed and sent for PCR? Yes No

Table S1. Patient and Clinician responses to the post examination questionnaire of their experience with LumenEye®

Patient responses		<i>n</i>	<i>%</i>
<i>More Comfortable than Expected</i>	Strongly Disagree	3	3%
	Disagree	6	6%
	Neutral	19	17%
	Agree	38	35%
	Strongly Agree	44	40%
<i>Total responses</i>		110	
<i>The procedure was embarrassing or awkward</i>	Strongly Disagree	36	32%
	Disagree	24	22%
	Neutral	22	20%
	Agree	18	16%
	Strongly Agree	11	10%
<i>Total responses</i>		111	
<i>The doctor was gentle</i>	Strongly Disagree	3	3%
	Neutral	4	4%
	Agree	24	22%
	Strongly Agree	80	72%
<i>Total responses</i>		111	
<i>I had enough privacy during the examination</i>	Strongly Disagree	2	2%
	Neutral	3	3%
	Agree	43	39%
	Strongly Agree	63	57%
<i>Total responses</i>		111	
<i>This examination is more convenient in the community</i>	Strongly Disagree	2	2%
	Neutral	4	4%
	Agree	26	24%
	Strongly Agree	78	71%
<i>Total responses</i>		110	
<i>Where would you rather have the examination</i>	Community	76	70%
	No Preference	28	26%
	Hospital	4	4%
<i>Total responses</i>		108	
<i>I feel there is a benefit from early specialist input whilst awaiting an appointment in the hospital</i>	Strongly Disagree	2	2%
	Neutral	5	5%
	Agree	25	23%
	Strongly Agree	78	71%
<i>Total responses</i>		111	
<i>I was comfortable having my images shared with a specialist</i>	Strongly Disagree	2	2%
	Neutral	2	2%
	Agree	27	25%
	Strongly Agree	79	72%
<i>Total responses</i>		110	
<i>I felt reassured my images were reviewed by a specialist</i>	Neutral	2	2%
	Agree	24	22%
	Strongly Agree	84	76%

	<i>Total responses</i>	110	
<i>LumenEye can benefit my health</i>	Neutral	4	4%
	Agree	27	25%
	Strongly Agree	79	72%
	<i>Total responses</i>	110	
<i>I have undergone rigid sigmoidoscopy before</i>	Yes	24	22%
	No	86	78%
	<i>Total responses</i>	110	
<i>How does LumenEye compare to your experience of rigid sigmoidoscopy</i>	Much worse	0	0%
	Worse	1	5%
	The same	4	19%
	Better	5	24%
	Much better	11	52%
	<i>Total responses</i>	21	
<i>If needed, I would be willing to undergo a further examination with a LumenEye</i>	Strongly Disagree	1	1%
	Neutral	4	4%
	Agree	31	28%
	Strongly Agree	74	67%
	<i>Total responses</i>	110	
<i>Overall Opinion</i>	Very Positive	87	79%
	Positive	20	18%
	Neutral	3	3%
	<i>Total responses</i>	110	
<i>Visual analogue score of how comfortable (100) or uncomfortable (0) was LumenEye examination</i>	0-24	6	6%
	25-49	22	21%
	50-74	28	26%
	75-100	50	47%
	<i>Total responses</i>	106	
	Clinician responses	n	%
<i>Were you able to make a diagnosis?</i>	Yes	91	80%
	No	23	20%
	<i>Total responses</i>	114	
<i>Confidence in the suspected diagnosis</i>	Very confident	62	54%
	Reasonably confident	38	33%
	Unsure	4	4%
	Unable to make diagnosis/incomplete examination	9	8%
	No answer	1	1%
	<i>Total responses</i>	114	
<i>Overall experience of LumenEye and CHiP</i>	Excellent	96	84%
	Good	11	10%
	Average	2	2%
	Poor	1	1%
	No answer (incomplete examination)	4	4%
	<i>Total responses</i>	114	

Figure S1 – ROC curve demonstrating the sensitivity and specificity of the LumenEye® for all pathology when compared with colonoscopy or flexible sigmoidoscopy (Gold Standard) findings (in 48 patients with subsequent colonoscopy or flexible sigmoidoscopy). Area Under Curve (AUC) = 81.9% (66.2-97.6%).

