Appendix 1. Items and clusters derived from the Concept Map, along their rating and bridging values.

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| --- | --- | --- | --- | --- |
| **Clusters and indicators** | | **Rating value** | **Bridging value** | **References** |
| **Cluster I: Patient centeredness and accessibility** | | **3,34** | **0,41** |  |
| 121 | The patient receives information about what to do after surgery in case of emergency | 4,50 |  | Brouwer, W. (2006); Faber, M. (2012) |
| 106 | Patient experiences problems in reaching ophthalmology department or clinic by telephone | 3,94 |  | Brouwer, W. (2006) |
| 75 | Needs assessment and decision for cataract surgery is based on the wishes of the patient | 3,89 |  | Brouwer, W. (2006); Zichtbare Zorg Ziekenhuizen (2009) |
| 100 | Consultations and preoperative examinations take place on the same day | 3,83 |  | Faber, M. (2012); Zichtbare Zorg Ziekenhuizen (2009) |
| 92 | Patient has contact with the same ophthalmologist during consultations | 3,72 |  | Brouwer, W. (2006) |
| 64 | Patient has the same ophthalmologist during consolation and surgery | 3,67 |  | Faber, M. (2012); Damman, O.C. (2012) |
| 25 | Cataract surgery was fully reimbursed by health care insurer | 3,59 |  | Brouwer, W. (2006) |
| 79 | Patient has experienced problems with the ophthalmologist that he/she wanted to visit because they had no contract with his/her health care provider | 3,56 |  | Brouwer, W. (2006) |
| 65 | Preliminary tests for cataract surgery take place in one day | 3,56 |  | Brouwer, W. (2006) |
| 95 | Patient has experienced problems with the permission of the health insurer with respect to cataract surgery | 3,50 |  | Brouwer, W. (2006) |
| 59 | Provider has a separate cataract care pathway for patients referred by their GP or by the optometrist | 3,41 |  | Holmes, K.  (2013) |
| 42 | Manner of informing about the day and time of cataract surgery | 3,39 |  | Brouwer, W. (2006) |
| 67 | Amount of time for explanation of surgery to the patient | 3,33 |  | Zichtbare Zorg Ziekenhuizen (2009) |
| 57 | Way of 1st day monitoring (e.g. by telephone, in hospital, by patient) | 3,28 |  | OCCUR |
| 122 | Patient needs permission of health insurance with regard to cataract surgery | 3,24 |  | Brouwer, W. (2006) |
| 19 | Patient experiences problems after referral to get an appointment with the ophthalmologist as soon as he/she wants | 3,24 |  | Brouwer, W. (2006); Damman, O.C. (2012) |
| 107 | Ophthalmologist prescribed medications that were fully reimbursed by the health insurer | 3,19 |  | Brouwer, W. (2006) |
| 3 | Cost of cataract care for patient (i.e. cost not / partially reimbursed by health insurer) | 3,06 |  | Brainstorm |
| 118 | Patient wanted to visit an ophthalmologist for the purpose of cataract surgery that has no contract with his / her health insurer | 3,00 |  | Brouwer, W. (2006) |
| 68 | Actual costs of cataract surgery | 3,00 |  | Lundström, M. (2009) |
| 34 | Waiting time for the cataract surgery | 2,94 |  | Brouwer, W. (2006); Damman, O.C. (2012); Zichtbare Zorg Ziekenhuizen (2009); ECHIM (2011); Conner-Spady, B.L. (2004) |
| 14 | Ophthalmologist helps the patient within fifteen minutes after agreed time | 2,83 |  | Brouwer, W. (2006) |
| 31 | Average length of a consultation with the ophthalmologist according to the patient | 2,69 |  | Brouwer, W. (2006) |
| 35 | Time of meeting ophthalmologist who performs cataract surgery and patient with cataract | 2,53 |  | Zichtbare Zorg Ziekenhuizen (2009) |
| 1 | Distance to hospital | 2,41 |  | Damman, O.C. (2012) |
| **Cluster II: Interpersonal conduct and expectations** | | **4,24** | **0,15** |  |
| 56 | Ophthalmologist takes the patient seriously (from patient perspective) | 4,72 |  | Faber, M. (2012); Brouwer, W. (2006) |
| 41 | Ophthalmologist provides information about the risks of surgery (from patient perspective) | 4,56 |  | Faber, M. (2012); Brouwer, W. (2006); OCCUR |
| 52 | Ophthalmologist is willing to talk with the patient about things who are not well expired (from patient perspective) | 4,56 |  | Brouwer, W. (2006) |
| 8 | Patient receives information about possible symptoms after surgery | 4,50 |  | Faber, M. (2012); Zichtbare Zorg Ziekenhuizen (2009); Brouwer, W. (2006) |
| 123 | Ophthalmologist explains things in an understandable way (from patient perspective) | 4,50 |  | Faber, M. (2012); Brouwer, W. (2006) |
| 20 | Ophthalmologist attentively listen to patient (from patient perspective) | 4,44 |  | Brouwer, W. (2006) |
| 124 | Ophthalmologist is polite to patient (from patient perspective) | 4,39 |  | Brouwer, W. (2006) |
| 86 | Ophthalmologist has enough time for patient (from patient perspective) | 4,39 |  | Faber, M. (2012); Brouwer, W. (2006) |
| 70 | Decision for cataract surgery is based on the ophthalmic examination by an ophthalmologist and taken by the patient in consultation with the ophthalmologist | 4,29 |  | NOG (2013) |
| 45 | Ophthalmologist, nurses and other hospital staff explained potential side effects in an understandable way to the patient | 4,28 |  | Brouwer, W. (2006) |
| 39 | Nurse / optometrist / TOA explains things in an understandable way to the patient (from patient perspective) | 4,28 |  | Brouwer, W. (2006) |
| 104 | Nurse / optometrist / TOA attentively listen to patient (from patient perspective) | 4,28 |  | Brouwer, W. (2006) |
| 120 | Patient receives information about which activity can and cannot after cataract surgery | 4,28 |  | Brouwer, W. (2006); Zichtbare Zorg Ziekenhuizen (2009) |
| 55 | Type of explanation to the patient about surgery on the first eye | 4,24 |  | Zichtbare Zorg Ziekenhuizen (2009) |
| 113 | Nurse / optometrist / TOA is polite to patient (from patient perspective) | 4,24 |  | Brouwer, W. (2006) |
| 105 | Care is aligned with other care providers (optometrist, nurse, general practitioner, etc) from patient perspective | 4,11 |  | Brouwer, W. (2006) |
| 94 | Patient received information about the consequences of cataract surgery for the use of glasses | 4,11 |  | Brouwer, W. (2006) |
| 4 | Ophthalmologist takes specific requirements of the patient into account (from patient perspective) | 4,11 |  | Brouwer, W. (2006) |
| 78 | Patient can choose between different lenses | 4,06 |  | Zichtbare Zorg Ziekenhuizen (2009) |
| 47 | The ophthalmologist informs the patient during surgery about what is happening (from patient perspective) | 4,00 |  | Faber, M. (2012); Brouwer, W. (2006) |
| 37 | Ophthalmologist and other health care workers give conflicting information to patient (from patient perspective) | 3,76 |  | Brouwer, W. (2006) |
| 11 | Patient has talked to anybody about the necessary help at home after cataract surgery | 3,67 |  | Brouwer, W. (2006) |
| 33 | Perception of ophthalmologist about the priorities of a patient to get a cataract surgery | 3,65 |  | Pager, C.K. (2004) |
| **Cluster III: Clinical results** | | **3,88** | **0,22** |  |
| 44 | Complication posterior capsule rupture | 4,50 |  | Damman, O.C. (2012); Zichtbare Zorg Ziekenhuizen (2009) |
| 90 | Complications during cataract surgery | 4,47 |  | Lundström, M. (2012); OCCUR; ICHOM (2014) |
| 28 | Postoperative complication: persistent corneal oedema | 4,19 |  | Lundström, M. (2012); ICHOM (2014) |
| 21 | Postoperative complication: uncontrolled elevated intraocular pressure | 4,19 |  | Lundström, M. (2012) |
| 63 | Postoperative complication: uveitis requiring medication | 4,13 |  | Lundström, M. (2012) |
| 88 | Corrected distance visual acuity (CDVA) | 4,06 |  | OCCUR; ICHOM |
| 2 | Outcomes of treatment be mirrored with other providers | 4,00 |  | Brainstorm |
| 6 | Best corrected visual acuity (BCVA) | 3,94 |  | Hahn, U. (2011); Hahn, U. (2012) |
| 82 | Postoperative complication: posterior capsule opacification that disrupts vision | 3,88 |  | Lundström, M. (2012) |
| 66 | Uncorrected distance visual acuity (UDVA) | 3,88 |  | OCCUR; ICHOM (2014) |
| 27 | Refractive outcome | 3,81 |  | Lundström, M. (2012); Hahn, U. (2011); Hahn, U. (2012); OCCUR |
| 116 | Percentage of readmissions (related to the operated eye) within 28 days of discharge after cataract surgery, for 6 months | 3,76 |  | AHRG (2013) |
| 83 | Patient is operate on the same eye again after cataract surgery within 3 weeks | 3,56 |  | Brouwer, W. (2006) |
| 13 | Uncorrected near visual acuity (UNVA) | 3,56 |  | OCCUR |
| 108 | Number of cataract surgeries in patients over 50 years | 3,06 |  | Zichtbare Zorg Ziekenhuizen (2009) |
| 77 | Percentage patients having a discharge intention of one day, who have an overnight admission following cataract surgery, during the 6 months’ time period | 3,06 |  | AHRG (2013) |
| **Cluster IV: Experienced results** | | **3,98** | **0,43** |  |
| 80 | Visual function according to the patient / Patient Reported Outcome Measure, PROM (there are several instruments to measure visual function the Catquest-9SF is recommended) | 4,41 |  | McAlinden, C. (2011) |
| 109 | Good distance vision, e.g. recognizing people across the street (from patient perspective) | 4,39 |  | Lundström, M. (2009); Brouwer, W. (2006) |
| 26 | Patient is satisfied / dissatisfied with current sight | 4,33 |  | Lundström, M. (2009) |
| 117 | Good medium distance vision, e.g. reading subtitles on TV (from patient perspective) | 4,22 |  | Lundström, M. (2009); Brouwer, W. (2006) |
| 96 | Recording of visual acuity prior to cataract surgery | 4,18 |  | NOG (2013) |
| 71 | Participation in traffic (from patient perspective) | 4,06 |  | Brouwer, W. (2006); OCCUR |
| 74 | Score for the ophthalmologist given by patients | 4,06 |  | Faber, M. (2012); Brouwer, W. (2006) |
| 98 | Score for the hospital given by patients | 4,00 |  | Faber, M. (2012); Brouwer, W. (2006) |
| 16 | Patient experiences obstacles in everyday life by the current vision | 4,00 |  | Lundström, M. (2009) |
| 60 | Registration of limitations in visual function prior to cataract surgery | 4,00 |  | NOG (2013) |
| 97 | The provider shares its own complication rate and patient satisfaction about cataract surgery with the patient (on the website and in the patient flyer) | 4,00 |  | Brainstorm |
| 102 | Good near vision, e.g. reading newspaper (from patient perspective) | 3,94 |  | Lundström, M. (2009); Brouwer, W. (2006) |
| 85 | Patient would recommend hospital / clinic to friends and family | 3,94 |  | Brouwer, W. (2006) |
| 91 | Provider uses PROM (patient reported outcome measure) | 3,88 |  | Brainstorm |
| 69 | Score for the nurse / optometrist / TOA given by patients | 3,83 |  | Brouwer. W. (2006) |
| 48 | Good very near vision, e.g. handwork (from patient perspective) | 3,82 |  | Lundström, M. (2009); Brouwer, W. (2006) |
| 10 | Registration of the opportunity to improve visual acuity and visual function prior to cataract surgery | 3,78 |  | NOG (2013) |
| 72 | Degree of pain patients experienced during surgery | 3,67 |  | Faber, M. (2012); Brouwer, W. (2006) |
| 32 | Not dependent of glasses after cataract surgery | 3,06 |  | Levy, P. (2010) |
| **Cluster V: Safety** | | **4,01** | **0,73** |  |
| 29 | Ophthalmologist, nurses and other hospital staff ask patient or he / she is allergic to certain medicines | 4,76 |  | Brouwer, W. (2006) |
| 9 | Ophthalmologist, nurses and other hospital staff ask patient or he / she is allergic to iodine | 4,71 |  | Brouwer, W. (2006) |
| 125 | Theatre room meets the nationwide standards in respect of the prevention of infection when a cataract operation is carried out under local anaesthesia | 4,65 |  | NOG (2013) |
| 30 | Complications of surgery are discussed in collegial consultation and, if necessary, improvement plans drawn up and implemented | 4,61 |  | Brainstorm |
| 38 | With disappointing performance of treatment or a significantly greater number of complications, the scientific society is called for an audit or a working visit is scheduled at a better performing clinic | 4,47 |  | Brainstorm |
| 5 | Each cataract surgery is recorded and, in event of a complication, the video is discussed in a collegial consultation for learning | 4,44 |  | Brainstorm |
| 49 | Healthcare provider uses a perioperative surgical checklist | 4,41 |  | Kelly, S.P. (2013) |
| 61 | Experience of the surgeon performing the cataract surgery | 4,24 |  | Brainstorm |
| 23 | Provider is accredited | 4,11 |  | Menachemi, N. (2008) |
| 73 | For anaesthesia use is made of ASA (risk assessment anaesthesia) | 3,94 |  | OCCUR |
| 87 | Presence of formal logistics for information transfer between employees | 3,82 |  | Brainstorm |
| 51 | Presence of formal process which takes account of urgency when planning cataract surgery | 3,65 |  | OCCUR |
| 50 | Patient is monitored during surgery by an anaesthesiologist | 3,41 |  | Faber, M. (2013); Zichtbare Zorg Ziekenhuizen (2009) |
| 89 | Position of the person who assists during cataract surgery | 3,24 |  | OCCUR |
| 110 | Care provider qualifies drop anaesthesia as OK or as outpatient surgery | 3,00 |  | Brainstorm |
| 36 | Place where cataract surgery takes place (OK / day treatment centre) | 2,59 |  | OCCUR |
| **Cluster VI: Process and structure** | | **3,82** | **0,53** |  |
| 114 | Participation in nationwide registration system which include complication registration | 4,24 |  | IGZ (2013) |
| 18 | Level of care professional who performs the examinations on hospital location in the patient with cataract | 4,18 |  | Zichtbare Zorg Ziekenhuizen (2009) |
| 40 | Physician determines systematic risk (e.g. COPD, dementia, deaf) | 4,13 |  | OCCUR; Faber, M. (2012); Brouwer, W. (2006) |
| 99 | Registration of the presence of cataract prior to cataract surgery | 4,06 |  | NOG (2013) |
| 15 | Function of doctor performing the surgery (e.g. pool, resident) | 4,06 |  | OCCUR |
| 54 | Percentage of patients who have had cataract surgery on both eyes, and in whom a check has taken place before the second eye was operated from 1 week after surgery of the first eye | 3,81 |  | NOG (2013) |
| 12 | Manner outpatient follow-up after the first check (e.g. return as complaints, 2nd eye surgery, sue for old pathology, sue for pathology prosecute by surgery) | 3,78 |  | OCCUR |
| 7 | Number of cataract surgeries per hospital location by specialism ophthalmology | 3,71 |  | Zichtbare Zorg Ziekenhuizen (2009) |
| 24 | Premium intraocular lens (multifocal, accommodating, toric IOLS) | 3,63 |  | Lundström,M. (2012) |
| 58 | Patient has been still in consultation after cataract surgery | 3,53 |  | Brouwer, W. (2006) |
| 93 | Percentage of patient who have had cataract surgery on both eyes, and in whom was at least 2 weeks between the two successive surgeries | 3,44 |  | NOG (2013) |
| 46 | Care professional who performs the 1st-day control in patients with cataract (e.g. ophthalmologist, resident, optometrist) | 3,25 |  | Zichtbare Zorg Ziekenhuizen (2009); OCCUR; Faber, M. (2012); Van Vliet, E.J. (2010) |
| **Cluster VII: Medical technical acting** | | **3,27** | **0,20** |  |
| 43 | Difficulty of surgery (e.g. small pupil, dense cataract, corneal opacities, previous vitrectomy, patient movements, floppy iris) | 4,44 |  | Lundström,M. (2012); ICHOM (2014) |
| 76 | Applied surgical technique for cataract surgery | 3,63 |  | OCCUR |
| 84 | Type of anaesthesia (drop, overall, retro bulbar, subtenon) | 3,44 |  | Lundström,M. (2012); OCCUR; Brouwer, W. (2006) |
| 53 | Location of IOL implantation (sack; sulcus; anterior chamber; no) | 3,44 |  | OCCUR |
| 17 | Applied phaco technique during cataract surgery | 3,35 |  | OCCUR |
| 62 | Keratometry K1 and K2 | 3,25 |  | OCCUR |
| 22 | Cumulative Dispersed Energy (CDE) during surgery | 3,25 |  | OCCUR |
| 81 | Postoperative medication (dexamytrex, lopidine, other) | 3,19 |  | OCCUR |
| 103 | Type of intraocular lens material | 3,19 |  | Lundström,M. (2012); OCCUR; Zichtbare Zorg Ziekenhuizen (2009) |
| 111 | Duration of surgery (minutes) | 3,18 |  | OCCUR |
| 112 | Incision (corneal (22 mm), corneal (28 mm), limbal, scleral, incision is enlarged, OCCI) | 3,06 |  | OCCUR |
| 115 | number of sutures after cataract surgery | 2,88 |  | OCCUR |
| 101 | Viscoelastic (progel, provics, other) | 2,88 |  | OCCUR |
| 119 | Location of incision (steepest axis, 100 degrees, temporal) | 2,63 |  | OCCUR |

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