Annual Report



LANDELIJK EXPERTISE CENTRUM KINDERMISHANDELING

1-1-2016 to 12-31-2016

June 2017, commissioned by the LECK board

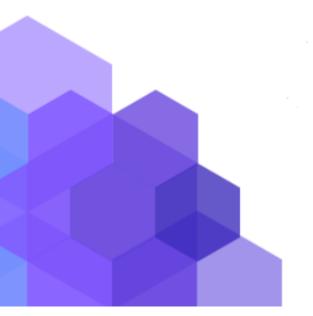


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1. Introduction

This is the third annual report by the National Child Abuse Expertise Centre (*Landelijk Expertise Centrum Kindermishandeling* = LECK). This report provides a summary of LECK's activities in 2016.

LECK was founded on October 31st, 2014 by the Academic Medical Centre Amsterdam, the Erasmus Medical Centre Rotterdam, the University Medical Centre Utrecht and the Netherlands Forensic Institute (NFI). LECK is the first and only co-operative structure that uses a combination of expertise in paediatrics and forensic-medical expertise in determining whether injuries justify a suspicion of child abuse. LECK aims to contribute to the protection of children by accelerating and improving the detection of child abuse, as well as child abuse policy.

LECK offers a solution for medical professionals nationwide who are in need of advice on child abuse without having to disclose patient data. These include paediatricians, child safety doctors, forensic doctors, and other medical professionals. Additionally, children can be referred to one of the LECK hospitals for consultation. LECK can be reached 24 hours a day, 7 days a week.

This report will mainly focus on LECK's core activity: the determination of injury in children. LECK's future perspectives as envisioned by the board will be expounded in the final section.

More information on LECK (about the organisation and its position, as well as its goals, values and method) can be found in the General Protocol and the document Quality Standards, available on www.leck.nu/documentatie.

September 2017

E. van de Putte, chairman Foundation LECK, on behalf of the board

thanks to: Marie-Louise Loos for providing the tables from the Castor database LECK

2. GENERAL INFORMATION

GENERAL DATA

Name: National Child Abuse Expertise Centre (Landelijk Expertise Centrum

Kindermishandeling) (LECK)

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professionals; general questions can be submitted by email)

IBAN: NL83 TRIO 0197 9961 08

BIC: TRIONL2U RSIN: 8544.97.730

ANBI-status: Granted from 10.31.2014 as a Public Benefit Organisation

3. MANAGEMENT AND MANAGEMENT MEETINGS

BOARD

From 1.1.2016 to 12.31.2016, the board of LECK consisted of the following members:

Chairman: Ms. E.M. van de Putte, MD, PhD
 Treasurer: Mr. Prof. R.R. van Rijn, MD, PhD

Secretary: Mr. W.A. Karst, MDDirector: Ms. M.J. Affourtit, MD

ADVISORY COMMISSION

Ms. A.M.W. Laeven-de Boer, of Berenschot Consultancy, PhD, MSc Mr. Prof. H.S.A. Heymans, professor emeritus paediatrics AMC, MD, PhD

LOCAL COORDINATORS

Each LECK location has its own coordinator:

AMC: Ms. A.H. Teeuw, MD
UMCU: Ms. I.M.B. Russel, MD
EUR: Ms. M.J. Affourtit, MD
NFI: Mr. W.A. Karst, MD

Coordinator/secretary: Ms. F. Kamberg and Ms. D. Riem-van de Meent

ADVISORS TO THE BOARD

Ms. N. Coebergh, Child Safety Doctor with Child Protection Services Rotterdam Rijnmond, MD Mr. B. Kruyver, forensic doctor with the Public Health Institute in the region Hollands Noorden, MD

4. GENERAL REVIEW OF CASE STUDIES

NUMBER OF CASES

From the January the 1st, 2016 to December the 31st, 2016, 223 cases were evaluated by LECK. These cases form the basis for the analyses in this report. The cases consisted of 189 requests for advice (84,8%) and 34 cases of face-to-face consultation (15,2%).

DAY AND TIME OF INCOMING REQUESTS

Most cases were reported during weekdays (208 cases, 93%). Only 15 cases came in during the weekends. A total 23% of the work took place outside of office hours.

24-HOUR CONNECTIVITY

From January 1st, 2016, to December 31st, 2016, a total 396 incoming phone calls were registered for 0900-5554555. The average number of phone calls per consultation/advice was 396/223 = 1,8. The average phone call lasted 6 minutes. 11 % of phone calls took place outside of office hours.

5. Analyse of advice given by LECK

In 2016, there were 189 cases in which LECK advised medical professionals on the possibility of child abuse.

ABOUT THE ADVISEES

Most requests for advice were submitted by paediatricians (57,5%), followed by Child Safety Doctors (15,9%), as is shown in Table 1. Requests for advice were mainly issued from provinces of The Netherlands that house a LECK hospital (Utrecht, Noord-Holland and Zuid-Holland) and from the provinces Noord-Brabant and Gelderland.

Table 1: function of advisees (n = 189)		
Function	Frequency (%)	
Paediatrician	108 (57,1)	
Child Safety Doctor	30 (15,9)	
Youth Doctor	2 /1 1\	
(preventive care)	2 (1,1)	
Emergency Doctor	2 (1,1)	
Child Protection	2 (1,1)	
(Jeugdzorg) Worker	2 (1,1)	
Forensic Doctor	1 (0,5)	
General Practitioner	0 (0)	
Other	44 (23,3)	
Total	189 (100)	

Others: child abuse detection worker 2x, specialist registrar orthopaedics, resident surgery, resident paediatrics 3x, coordinator child abuse team, coordinator child protection and domestic violence, GP registrar in hospital, paediatric intensivist 2x, paediatric neurologist, social worker at school, worker Child Protection Services (*Veilig Thuis*), registrar child surgery, neighbourhood coach, paediatric nurse

ABOUT THE CHILDREN

Most instances in which advice was given concerned boys (103 cases, 54,5%). With 4 cases, the child's gender was not disclosed (Table 2). This differs from 2015, when most cases were girls.

Table 2: gender of children subject of inquiry (n = 189)		
Gender	Frequency (%)	
Boy	103 (54,5)	
Girl	82 (43,4)	
Unknown	4 (2,1)	
Total	189 (100)	

The average age of the children on whose behalf LECK was asked for advice was 2 years and 3 months. The oldest patient was 17 years old, the youngest 4 days old.

THE INQUIRIES

In Table 3, the cases in which LECK gave advice are distributed across categories according to the subject of inquiry.

Table 3: Categorisation of advice requests (n = 188)*	
Category	Frequency (%)
Advice with regard to injury/ skin anomalies/ physical anomalies	137 (72,9)
Advice with regard to radiological anomalies without re-evaluation by LECK	42 (22,3)
Advice with regard to radiological anomalies re-evaluated by LECK	38 (20,2)
Advice with regard to deviating results of additional investigations	6 (3,2)
Advice with regard to behavioural signals/ symptoms/ risk factors	6 (3,2)
*A case may fit several categories. The data of one case are lacking.	

The most common question by far was if the observed injury fit the described trauma mechanism and if the cause of injury or deviation could be ascertained. There were also many questions on what additional investigation was necessary, especially in terms of the work-up in the case of suspicion of child abuse.

WHY WAS CHILD ABUSE CONSIDERED BY THE ADVISEES?

Table 4 shows the reasons why the professionals considered the possibility that their patients were victims of child abuse. The most common reason was the presence of injury and/or skin anomalies, often accompanied by explanations that did not fit the injury.

leason	Frequency (%)
njury and/or skin anomalies	146 (77,2)
eviations found in supplementary examination	51 (27,0)
ijury did not fit the given explanation	33 (17,5)
hysical symptoms	17 (9,0)
esence of risk factors	15 (7,9)
consistent narrative	7 (3,7)
iury does not fit the child's age	6 (3,2)
lay in attendance	5 (2,6)
ardian claims abuse has taken place	5 (2,6)
ild claims he/she/ another child was abused	3 (1,6)
ecedent of (unexplained) injury in patient history	3 (1,6)
ehavioural signals by child	3 (1,6)
ns of neglect on child	1 (0,5)
her	19 (10,1)

Other: parents show signs of indifference, Child Protection Services (Veilig Thuis) claims child abuse, lack of plausible explanation caused by disease/underlying pathological background (2x), doubt as to plausibility of explanation due to age and purported mechanism of incident.

In the 146 cases in which injury and/or skin anomalies were found, these mostly concerned hematomas, fractures and skull/brain injury (Table 5).

Table 5: injury and/or skin anomalies in cases subject of inquiry (n = 189)*	
Injury and/or skin anomalies	Frequency (%)
Hematoma†	68 (36)
Fractures other than skull fractures	44 (23,4)
Skull fracture	21 (11,1)
Brain damage ‡	20 (10,6)
Erythema†	10 (5,3)
Burns/ burn marks†	8 (4,2)
Excoriation†	8 (4,2)
Erosion†	7 (3,7)
Retina bleedings	5 (2,6)
Laceration	4 (2,1)
Biting wounds	3 (1,6)
Anal injury§	2 (1,1)
Genital injury ¥	1 (0,5)
Internal stomach- and/or pelvic injury	1 (0,5)
Bald spots	1 (0,5)
Stabbing wound	1 (0,5)
Scars	1 (0,5)
Other	22 (11,6)
*C	

^{*} Several injuries and/or skin anomalies possible per case

[†] In places other than the anal/genital region

[‡] Subdural-, subarachnoidal-, intercerebral, subgaleal bleedings, dilated peripheral CSF areas, signs of ischemia, contusion

[¥] Wounds, hematomas, erythema, possible laceration

Table 5: injury and/or skin anomalies in cases subject of inquiry (n = 189)*

§ Erythema, petechiae

Other: skin anomalies in anal region, secondary infected friction injury, subcutaneous fluctuating parietal swelling, rectum perforation, infection fluid from forehead and fever, red lesions / vesicles around vulva/anus, signs of myositis on MRI, distended thorax, necrosis on ears, skin deviations that suggest the imprint of a shower head, swollen back of the head (2x) condylomata accuminata, pigment spots of triangular shape, ruptured ear drum, subconjunctival haemorrhage, severe erosive diaper dermatitis, petechiae on oropharynx, hair in anus.

EXPERTISE USED IN ADVISING

Table 6 shows what kind of expertise was used by LECK in providing advice. All requests for advice were obliged and treated by a LECK paediatrician. In all cases, a forensic doctor of the NFI was consulted immediately. All inquiries were treated during the weekly case studies meeting of LECK, which was always attended by one or several forensic doctors specialised in paediatrics. Paediatric radiology was involved in 80 cases (42%). At times, other specialists were consulted, mainly paediatric dermatology and paediatric ophthalmology. In total, for these 189 cases 8 different disciplines were consulted (beside paediatrics and forensic medicine).

Table 6: expertise used in advising (n = 189)*	
Discipline	Frequency (%)
Paediatrics	189 (100)
Forensic Medicine	189 (100)
Paediatric Radiology	80 (42,3)
Paediatric Ophthalmology	10 (5,3)
Paediatric Dermatology	8 (4,2)
Social Work	4 (2,1)
Paediatric Neurology	4 (2,1)
Other	3 (1,6)
* Several disciplines are possible for given case. Other: Child infection disease, paediatric otorhinolaryngologist. paediatric nephrologist	

SUBJECT OF ADVICE BY LECK

Table 7 shows the subject of advice given by LECK. When it is stated that advice was given with regard to a radiological skeletal survey, this means that advice was given either for or against the procedure. For 26 cases (13%), the advice given was supported with reference to medical-scientific literature.

Table 7: Subject of advice (n = 189)*	
Advice concerned:	Frequency (%)
Radiological skeletal survey	64 (33,9)
Re-evaluation of radiology by LECK radiologist	49 (25,9)
Physical examination	45 (23,8)
Radiological examination other than radiological skeletal survey	39 (20,6)
Camera photos	32 (16,9)
Formulating an injury description	30 (15,9)
Supplementary history	29 (15,3)
Ophthalmoscopy	25 (13,2)
Consulting Child Protection Services (Veilig Thuis)	25 (13,2)
Notifying Child Protection Services (Veilig Thuis)	22 (11,6)
Medical care	18 (9,5)

15 (7,9)
11 (5,8)
10 (5,3)
8 (4,2)
7 (3,7)
5 (2,6)
5 (2,6)
4 (2,1)
3 (1,6)
2 (1,1)
1 (0,5)
7 (3,7)
18 (9,5)

^{*} In each case, advice may be given that touches on several of the abovementioned topics.

Other: general concern with regard to the agreements between parents, follow-up by paediatrician of social paediatrics, sending imagery to AMC, parents or Child Protection Services reporting to the police, coordination with police task group sexual offence and urgent physical examination by the paediatrician, determining causes of injury (2x), unspecified (5x), border cases of child abuse, safety control of home situation, probability of inflicted injury, probability of trauma by impact with blunt object, tip-to-toe examination of other children, taking tissue samples.

SUSPICION OF CHILD ABUSE AFTER EVALUATION BY LECK

Table 8 shows how likely LECK estimated child abuse to be, based on the provided information.

In 14 cases, LECK concluded that the injury fits a disease or other affliction that excludes child abuse. These were severe erosive diaper dermatitis cause by a M. Jacquet, Mongolian spots (2x), birth trauma (4x), diffuse skin affliction, lichen sclerosis (2x), impetigo, coagulopathy, Henoch Schönlein, and a perianal venous pooling. In 16 cases, LECK concluded that child abuse had almost certainly occurred. In these cases, the most common afflictions included: beatings with hard object (possible end of metal tube), collision with blunt object such as a garden hose, pinching injury. In 26 cases (14%), child abuse was concluded to be likely; in 35 cases (18,5) child abuse was considered to be possible. In 34 cases (18%) LECK did not have the necessary data to confirm or falsify the suspicion. In 76 cases (40,2%) LECK concluded that child abuse was unlikely. Table 9 and 10 illustrate the nature of the injury or complaint.

Table 8: probability of child abuse (n = 189)	
Probability of child abuse	Frequency (%)
Almost certain †	16 (8,5)
Likely ‡	26 (13,8)
Possible ¥	35 (18,5)
Unlikely §	76 (40,2)
Almost certainly not ∞	5 (2,6)
Unclear, further inquiry necessary	34 (18)
Total	192 (100)

- † For instance: in case a parent has admitted to committing child abuse
- ‡ For example: in case of brain injury with subdural hematoma, retina haemorrhage, or rib fractures
- ¥ For example: in case of linear parietal skull fracture without brain damage and without plausible explanation
- § For example: in case of fractures associated with accidental injury with adequate explanation
- ∞ For example: in case a disease or other affliction that excludes abuse explains the injury

Table 9: kind of abuse in categories possible - almost certain abuse (n = 77)*		
Kind of abuse	Frequency (%)	
Physical abuse	55 (71,4)	
Sexual abuse	12 (15,6)	
Physical neglect	5 (6,5)	
Domestic violence	0 (0)	
Paediatric Condition Falsification	2 (2,6)	
Emotional abuse	2 (2,6)	
Emotional neglect	1 (1,3)	
* several kinds may apply for a given case		

Table 10: cause of injury for categories unlikely - almost certainly no abuse (n = 81)	
Cause injury / anomalies	Frequency (%)
Accidental injury	61 (75,3)
Disease or affliction (including birth trauma)	11 (13,6)
Normal variation	4 (4,9)
Unknown	5 (6,2)
Total	81 (100)

6. Cases outside of office hours

LECK can be reached and mobilised 24/7. This is relatively expensive, but necessary to be able to satisfy the existing demand for care. The cases reported outside of office hours are summarised below.

Of 223 cases, 51 (22,9%) were reported outside of normal office hours, which are defined as follows: Monday to Friday, 08:00-17:00. These cases concerned 48 requests for advice and 3 face-to face consultations.

It was relevant to know whether the cases outside of office hours were more or less severe with regard to the odds of child abuse. Table 11 shows how likely LECK estimated child abuse to be, based on the provided information.

Table 11: Probability of child abuse (n = 51)	
Probability of child abuse	Frequency (%)
Almost certain †	6 (11,8)
Likely ‡	11 (21,6)
Possible ¥	12 (23,5)
Unlikely §	15 (29,4)
Almost certainly not ∞	3 (5,9)
Unclear, further inquiry necessary	5 (9,8)
Total	51 (100)
† For instance: in case a parent has admitted to committing child abuse	

In 33,4% of cases, child abuse was likely to almost certain, compared to 22,3% in the total sample. The cases that were reported outside of office hours were therefore significantly more likely to be true child abuse cases. Of course, immediate recourse to safety measures is imperative for the sake of these children especially.

In 35,2% of cases, child abuse was unlikely to almost certainly absent. It is important to be able to falsify or confirm the suspicion quickly, especially in view of safety measures for the child, his/her siblings, as well as for the parents. In about 10%, closer examination was necessary, such as supplementary radiology.

[‡] For example: in case of brain injury with subdural hematoma, retina haemorrhage, or rib fractures

[¥] For example: in case of linear parietal skull fracture without brain damage and without plausible explanation

[§] For example: in case of fractures associated with accidental injury with adequate explanation

[∞] For example: in case a disease or other affliction that excludes abuse explains the injury

7. Publications 2016

In 2016, the members of LECK have been involved in 20 publications on child abuse. 7 of these were published in Dutch scientific journals. Below is a list of the publications.

- 1. Teeuw AH, Sieswerda-Hoogendoorn T, Aaftink D, Burgers IA, Vrolijk-Bosschaart TF, Brilleslijper-Kater SN, Heymans HS, van Rijn RR. Assessments carried out by a child abuse and neglect team in an Amsterdam teaching hospital led to interventions in most of the reported cases. Acta Paediatr. 2016 Dec 30. PMID: 28036102.
- 2. Schouten MC, Karst WA, van der Stel HF, Teeuw AH, van de Putte EM. An integrated approach including paediatric and forensic medical expertise on suspicion of child abuse. Ned Tijdschr Geneeskd. 2016;160(0):D941. Dutch. PMID: 27879185.
- 3. van den Hoven CM, van Berkestijn FM, Russel-Kampschoer IM, Karst WA, Voskuil-Kerkhof ES. Retinal haemorrhages as a symptom of child abuse. Ned Tijdschr Geneeskd. 2016;160(0):D266. Dutch. PMID: 27879177.
- 4. Affourtit MJ, Korfage IJ, Louwers EC. Screening for child abuse at emergency rooms is useful. Ned Tijdschr Geneeskd. 2016;160(0):D790. Dutch. PubMed PMID: 27848909.
- 5. Sittig JS, Uiterwaal CS, Moons KG, Russel IM, Nievelstein RA, Nieuwenhuis EE, van de Putte EM. Systematic detection of physical child abuse at emergency rooms. Ned Tijdschr Geneeskd. 2016;160(0):D672. Dutch. PMID: 27848908.
- 6. Schouten MC, van Stel HF, Verheij TJ, Nieuwenhuis EE, van de Putte EM. A screening protocol for child abuse at out-of-hours primary care locations: a descriptive study. BMC Fam Pract. 2016 Nov 8;17(1):155. PMID: 27825297.
- 7. Bais B, Karst WA, Kubat B, Verdijk RM. Persistent Retinal Iron in Abusive Head Trauma. J Forensic Sci. 2016 Nov;61(6):1693-1696. PMID: 27783389.
- 8. Hoytema van Konijnenburg EMM, van der Lee JH, Teeuw AH, Lindeboom R, Brilleslijper-Kater SN, Sieswerda-Hoogendoorn T, van Goudoever JB, Lindauer RJL. aftERcare-group. Psychosocial problems of children whose parents visit the emergency department due to intimate partner violence, substance abuse or a suicide attempt. Child Care Health Dev. 2017 May;43(3):369-384. PMID: 27774638.
- 9. Nusman CM, van Bellegem AC. Refeeding in a teenager with an eating disorder; when the patient refuses, but the doctor is obliged to intervene. Ned Tijdschr Geneeskd. 2016;160(0):D896. Dutch. PMID: 27581871.
- 10. Arthurs OJ, van Rijn RR, Whitby EH, Johnson K, Miller E, Stenzel M, Watt A, Taranath A, Perry DH. ESPR postmortem imaging task force: where we begin. Pediatr Radiol. 2016 Aug;46(9):1363-9. Review. PMID: 27412272.
- 11. Vester ME, Visser G, Wijburg FA, van Spronsen FJ, Williams M, van Rijn RR. Occurrence of subdural hematomas in Dutch glutaric aciduria type 1 patients. Eur J Pediatr. 2016 Jul;175(7):1001-6. PMID: 27246831.
- 12. Buiskool M, Nijs HG, Karst WA, Berger CE. More on the strength of evidence in forensic pathology. Forensic Sci Med Pathol. 2016 Jun;12(2):238-9. PMID: 27020888.
- 13. Sittig JS, Uiterwaal CS, Moons KG, Russel IM, Nievelstein RA, Nieuwenhuis EE, van de Putte EM. Value of systematic detection of physical child abuse at emergency rooms: a cross-sectional diagnostic accuracy study. BMJ Open. 2016 Mar 22;6(3):e010788. PMID: 27006346.
- 14. Wiedijk JE, Soerdjbalie-Maikoe V, Maat GJ, Maes A, van Rijn RR, de Boer HH. An accessory skull suture mimicking a skull fracture. Forensic Sci Int. 2016 Mar;260:e11-3. PMID: 26860068.
- 15. Hoytema van Konijnenburg EM, Diderich HM, Teeuw AH, Klein Velderman M, Oudesluys-Murphy AM, van der Lee JH. aftERcare-Group.; Hague-Group.. Comparing policies for children of parents attending hospital emergency departments after intimate partner violence, substance abuse or suicide attempt. Child Abuse Negl. 2016 Mar;53:81-94. PMID: 26718263.
- 16. Hoytema van Konijnenburg EM, Vrolijk-Bosschaart TF, Bakx R, Van Rijn RR. Paediatric femur fractures at the emergency department: accidental or not? Br J Radiol. 2016;89(1061): 20150822. PMID: 26642309.

- 17. Teeuw AH, Hoytema van Konijnenburg EM, Sieswerda-Hoogendoorn T, Molenaar S, Heymans HS, van Rijn RR. Parents' Opinion About a Routine Head-to-Toe Examination of Children as a Screening Instrument for Child Abuse and Neglect in Children Visiting the Emergency Department. J Emerg Nurs. 2016 Mar;42(2):128-38. PMID: 26547572.
- 18. Teeuw AH, Sieswerda-Hoogendoorn T, Sangers EJ, Heymans HS, van Rijn RR. Results of the implementation of a new screening protocol for child maltreatment at the Emergency Department of the Academic Medical Center in Amsterdam. Int Emerg Nurs. 2016 Jan;24:9-15. PMID: 26067096.
- 19. Schouten MCM, van den Berg L, Teeuw AH, van de Putte EM, Blauwe plekken bij kinderen: een medisch diagnostisch proces, Praktische Pediatrie, 2016; 1: 35-40.
- 20. Son J van, Duijst W, Putte E van de, Teeuw R, Haanstra H, Handelingsprotocol nader onderzoek naar de doodsoorzaak bij kinderen, Praktische Pediatrie, 2016; 3: 138-143

8. FINANCIAL

FINANCING 2016

In 2016, LECK was financed in its entirety by the Ministry of Health, Welfare and Sport. Its financial means mainly go into hiring its personnel, namely:

- Paediatricians in the Academic Medical Centre Amsterdam, the University Medical Centre Utrecht en the Erasmus Medical Centre in Rotterdam (guaranteeing a 24-hour service)
- Forensic doctors at the Netherlands Forensic Institute
- A coordinator and a secretary in UMC Utrecht

Additionally, a small amount of the funds are spent on connectivity (the central phone number), the development of the website and the development of a database.

ANBI-STATUS

Foundation LECK has the Dutch tax status Public Benefit Organisation (ANBI) allotted to it by the Dutch Tax Agency.

FUTURE FINANCING

The Ministry of Health, Welfare and Sport is responsible for the continuity and availability of forensic medical expertise for children. A solid plan for future financing is now being developed, but it is too early to tell what the exact outcome might be.

9. LECK'S VISION FOR THE FUTURE

In the past year, LECK has again shown that it plays an important role in injury interpretation in case of suspected child abuse. LECK distinguishes itself from all other medical-forensic expertise in the country by combining medical-forensic expertise and paediatric expertise. The added value of this is apparent from the fact that in 40% of cases, abuse could be excluded with near total certainty. In these cases, 20% were associated with disease or normal variation. Knowledge of disease is typically present within medical disciplines, and much less common among forensic-medical experts. In 22% of cases, child abuse was concluded to be likely to almost certain. In 18,5% of cases, child abuse was concluded to be possible. This category, which is subject to most uncertainty, was 33% in 2015. This means that LECK can be increasingly certain in its conclusions on the likelihood of abuse.

In 2016, a significant increase of 43% took place in the number of advisory cases (from 132 to 189), whereas the number of face-to-face consultations dropped. In the opinion of LECK, a child should be examined at a local facility, and if possible only one medical examination should take place. Most consultations were with children who had already been admitted to one of the LECK locations.

Apart from paediatrics and forensic medicine, 14 different disciplines were involved in the cases where LECK issued advice and/or provided face-to-face patient consultation.

LECK is able to fulfil its role owing to the infrastructure of academic hospitals, which house all necessary disciplines, as well as the close cooperation with the NFI. LECK now has 3 locations. The referrer and advisees mainly come from the provinces where the LECK locations are. LECK's cooperation with Child Safety Doctors and regional forensic doctors also makes the detection of injury possible on a regional level. When it comes to the determination of the cause of injury, however, the combination of paediatric and forensic medical expertise is always preferable.

When abuse has been reported to the police, consultancy by LECK is no longer in question. The documentation of injury and the acquisition of samples will then be in the hands of the responsible agents within the forensic medical sphere. LECK is of added value mainly in the first two steps of the Child Abuse Reporting Code, when there is still doubt about the nature of the injury or signal with regard to the existence of external, non-accidental causes, in view of a possible suspicion of child abuse.

LECK offers its counsel on a 24/7 basis, as well as instant care for children whose injuries need to be interpreted and/or who are suspected to be victims of child abuse. 23% of all cases present themselves outside of office hours. The cases that are reported outside of office hours are relatively more severe, in the sense that confirmed abuse seems more common (about a third of cases). To protect these children as well as any siblings, immediate safety measures are crucial. These requests cannot wait until office hours recommence. This would be unsafe for the children involved, unethical towards the parents, and frustrating for the referrer. In these cases, additional expertise is often necessary (for instance, from forensic radiology).

In 2017 and 2018, LECK will focus on quality control. All centres will therefore be visited by external auditors. Additionally, LECK will endeavour to raise more awareness among medical professionals who are potential advisees, especially among general practitioners. The sooner a suspicion of child abuse is

disproved or confirmed, the sooner adequate protection may be provided. LECK always indicates when Child Protection Services (*Veilig Thuis*) need be consulted or notified. LECK cooperates closely with Child Safety Doctors, by means of shared educational programmes as well as by shared case study meetings. There is an on-going dialogue between LECK, Zorginstituut Nederland, the Ministry of Health, Welfare and Sport, and the workgroup Forensic Medical Child Care about the future financing of LECK and its future position as an institution. It is expected that the final financial and organisational structure will be decided upon in the course of 2018.

Addendum: list of LECK physicians per 12.31.2017

Name	Functie	Center
M. Affourtit	Kinderarts	EMC
A. van Bellegem	Kinderarts	AMC
F. van Berkestijn	Kinderarts	UMCU
R. Bilo	Forensisch arts	NFI
M. Bouwman	Kinderarts	AMC
W. Karst	Forensisch arts	NFI
R.J. Nievelstein	Kinderradioloog	UMCU
S. Nijhof	Kinderarts	UMCU
H. Nijs	Forensisch arts	NFI
P. Puiman	Kinderarts	EMC
E. van de Putte	Kinderarts	UMCU
R. van Rijn	Kinderradioloog	AMC
S. Robben	Kinderradioloog	MUMC
J. Ruskamp	Kinderarts	UMCU
I. Russel	Kinderarts	UMCU
A. Smeijers	Kinderarts	AMC
R. Teeuw	Kinderarts	AMC
H. Terlingen	Forensisch arts	NFI
S. de Vries	Forensisch arts	NFI
S. Wolt	Kinderarts	UMCU

EMC: Erasmus Medical Center, Sophia Children's Hospital AMC: Academic Medical Center, Emma Children's Hospital

MUMC Maastricht University Medical Center

UMCU: University Medical Center Utrecht, Wilhelmina's Children's Hospital

NFI: Dutch Forensic Institute