PROVINCE OF NOVA SCOTIA)
HALIFAX REGIONAL MUNICIPALITY)

IN THE MATTER OF:

The Dental Act (the "Act"), S.N.S.1992, c. 3

as amended

-and-

IN THE MATTER OF:

Dr. Julie Knoll Dental Practitioner, of Halifax Regional Municipality, Province of Nova Scotia

SETTLEMENT AGREEMENT

Dr. Julie Knoll, a licensee with the Provincial Dental Board of Nova Scotia (the "PDBNS"), hereby agrees with and consents to the following:

Statement of Facts

The Incident

- 1. Dr. Knoll is a dentist that practices dentistry and dental anesthesia at Granville Dental Centre, a community dental clinic in Bedford, Nova Scotia.
- 2. On May 3, 2022, a thirty-two (32) month old child (the "Patient") attended Dr. Knoll's dental office accompanied by her mother for the treatment of caries and a possible fractured tooth under sedation (the "Treatment").
- 3. The Patient had been referred to Dr. Knoll by the Patient's general dentist. The referring dentist did not provide Dr. Knoll with any information about the Patient's health history and no request was made to the general dentist for same.
- 4. On March 28, 2022, approximately five weeks ahead of the Treatment, Dr. Knoll conducted a pre-treatment telephone consultation with the Patient's father. The records from this encounter indicate that Dr. Knoll completed a medical history. The records further indicate that the father advised Dr. Knoll that the Patient had been diagnosed with asthma one month prior, that was triggered by a "URTI" or upper respiratory tract infection. The father indicated that the asthma was diagnosed after 3 to 4 weeks of wheezing from respiratory infection, (not COVID). The father denied any hospitalizations, and indicated that asthma was not exercise induced.
- 5. The Patient's records from the telephone consultation on March 28 indicate the father denied all medical conditions in the system review except asthma. Dr. Knoll

- marked the cardiovascular, renal, neurological, endocrine, gastrointestinal, and musculoskeletal systems as being "normal."
- 6. As is Dr. Knoll's standard practice, her office provided the Patient's family with pretreatment forms and informational forms. The forms expressly provide, among other things, that consultation is to discuss child/family medical history to ensure Dr. Knoll administers sedation safely. Moreover, those forms ask that parents update Dr. Knoll should there be any changes to the Patient's health.
- 7. On the day of the Treatment, the Patient attended Dr. Knoll's office with her mother. Dr. Knoll completed a medical history. At that time, the Patient's mother told Dr. Knoll that the Patient had recovered from COVID-19 in the past few months and that it was not really asthma, as they were unable to diagnose the Patient with asthma given her age. The mother further advised that the Patient did not have recent fever, sore throat, vomiting, cough, diarrhea, or itchy skin. She did not as of that date have any signs of any illness and the Patient appeared physically fit.
- 8. On the day of the Treatment, Dr. Knoll examined the Patient's lungs and concluded that the Patient was healthy. In particular, the Patient's breathing and heart rate were within normal limits. The Patient's chest was recorded as being clear.
- 9. Dr. Knoll then proceeded with the Treatment, which involved deep sedation of the Patient under a combination of intramuscular, nitrous oxide, and intravenous sedation.
- 10. The Patient was first given an intramuscular injection of midazolam 3 mg and ketamine 10 mg outside of the Treatment room. After a period of time, the Patient was brought into the Treatment room where monitors were placed and the Patient's vital signs were observed to be stable.
- 11. A nasal hood was then applied with nitrous oxide and oxygen. When the Patient had reached an appropriate level of sedation, the nasal hood was removed to do dental x-rays. No end-tidal carbon dioxide was measured after removal of the nasal hood.
- 12. After the dental x-rays, the nasal hood was reapplied and an intravenous line was inserted in a saphenous vein to administer 30 mg of propofol, which did not result in apnea. Vital signs remained stable as reported by Dr. Knoll. A nasal airway was inserted which was immediately followed by a cough.
- 13. Following the insertion of the nasal airway, 10 mg of propofol were administered but the Patient's oxygen saturations immediately plunged from 99% down to within the 60% range. Immediately, bag valve mask ventilation was undertaken with 100% oxygen by Dr. Knoll. Despite this, the saturations did not recover and the Patient's heart rate dropped to a number in the low 50s. At this point, the Patient went into cardiac arrest.

- 14. Without a palpable pulse, an automated external defibrillator was applied, which did not deliver a shock. Furthermore, Dr. Knoll administered 0.15mg of Epinephrine intravenously. Dr. Knoll activated the Emergency Medical Services System and performed cardiopulmonary resuscitation on the Patient for approximately five minutes. Dr. Knoll did not attempt intubation of the Patient.
- 15. Once the Emergency Medical Services team arrived, they assumed management of the emergency. The paramedics performed cardiopulmonary resuscitation and attempted intubation but it was unsuccessful. The Patient was transferred to the IWK Health Centre in Halifax ("IWK"), Nova Scotia where she became responsive. The Patient was later admitted to the ICU.
- 16. It appears that the Patient had undergone approximately forty-five minutes of cardiopulmonary resuscitation before she became responsive.
- 17. The Patient was discharged from the IWK to home the following morning (May 4, 2022). The IWK's discharge summary notes the following regarding the patient's status around the time she was discharged from the hospital:

On the morning of May 4, 2022, [the Patient] was seen in the Pediatric Medical Unit at which time she had been stable overnight and her parents felt that she was back to her baseline. She had complained of sternal pain overnight, for which she received Tylenol. [The Patient] was reported by parents to be playing and running around the room. Mom and dad thought she was at her normal cognitive level. She was eating and drinking well and had slept well. The parents did report a concern about her "being off balance and not as coordinated" but felt this was steadily improving. She has been breastfeeding on and off throughout the evening. Repeat lab work showed that her coagulation studies were normal and her VEG was now normal. Her ALT was still elevated, but decreased to 95. AST was still elevated at 78; however, decreased. Her lactate was unchanged at 2.7.

DISPOSITION ON DISCHARGE

[The Patient] was discharged home with her parents. At the time of discharge, physical exam showed that she was afebrile, her blood pressure was 104/52, pulse was 100 beats per minute, and she was satting 95% on room air with a respiratory rate of 30. She was observed climbing up and down on furniture and running. She was able to answer questions and follow directions. She was not pale. Her cardiovascular exam revealed a normal SI and S2 with no extra heart sounds and no murmur. Respiratory exam revealed good air entry bilaterally with no wheeze, no crackles, and no increased work of breathing. Her abdomen was soft, nontender, and nondistended with no hepatosplenomegaly. Her GCS was

- 15. Her pupils were equal and reactive at 3mm. She had normal eye movements, her face was symmetrical. She had normal tone in both upper and lower extremities. She was moving all 4 limbs purposefully.
- 18. Subsequent to the Patient leaving Dr. Knoll's office in an ambulance, Dr. Knoll was advised, for the very first time, that the Patient had:
 - a. COVID-19 twice; and
 - b. Been brought to the hospital for breathing problems associated with COVID-19.
- 19. Following the Incident, Dr. Knoll reported to the Sedation Inspection Team, consisting of Dr. Curtis Gregoire and Dr. Ben Schelew, that there had been a lack of clarity around the Patient's medical history. Dr. Knoll opined that perhaps there was a language barrier with the Patient's mother, whose first language appeared to be Spanish. According to Dr. Knoll, the Patient's parents provided Dr. Knoll with conflicting health information: the Patient's father reported that the Patient had mild asthma which was not connected with COVID-19 and the Patient's mother reported that the Patient had in fact had COVID-19 within the last few months.

The Discipline Process

- 20. Following the Incident, Dr. Knoll informed the PDBNS of the adverse sedation event involving the Patient (the "Incident") in the early afternoon of May 3, 2022.
- 21. On May 5, 2022, the Sedation Inspection Team conducted an office inspection and interview of Dr. Knoll at Granville Dental Centre in response to the Incident.
- 22. On May 11, 2022, the Complaints Committee of the PDBNS held a meeting pursuant to Section 34 of the *Dental Act* (the "Act"). The Complaints Committee determined that urgent and compelling circumstances existed and in the interest of the public, resolved to impose interim restrictions on Dr. Knoll's license including only mild-to-moderate sedation and only for American Society of Anesthesiologist I ("ASA I") patients aged six (6) and over.
- 23. On May 12, 2022, Dr. Knoll requested a meeting of the Complaints Committee pursuant to Section 34(3) of the *Act* to terminate the restriction imposed pursuant to the Complaints Committee's decision of May 11, 2022. A meeting was held on May 19, 2022 and the Complaints Committee resolved that the restrictions on Dr. Knoll's sedation permit from May 11, 2022 ought to be maintained.

24. Following this decision of the Complaints Committee, the matter was referred to the Discipline Committee in compliance with Section 34(4) of the *Act* and a hearing of the Discipline Committee will be held.

The Registrar's Complaint

25. On July 11, 2022, the Registrar lodged a complaint against Dr. Knoll in connection with the incident involving the Patient.

Admissions

Dr. Julie Knoll admits the facts set out in the Statement of Facts and admits that the following matter constitutes a breach of section 4(1)(c) of the *Discipline Regulations*:

a) Dr. Knoll's patient assessment and medical history taking of the Patient constitute a failure to treat a patient with a standard of skill, knowledge, or judgement that is reasonable in the practice of dentistry in Nova Scotia.

Sanctions

Dr. Julie Knoll and the PBDNS agree, conditional upon the recommendation of this Settlement Agreement by the Complaints Committee and the approval of this Settlement Agreement by the Discipline Committee, that Dr. Knoll shall be subject to the following sanctions:

- a) Dr. Knoll is required to successfully complete a customized remedial module at the University of Toronto at her own expense, within twenty-four (24) months of the date of the Order approving this Settlement Agreement. The module must cover review of patient assessment and medical history taking for pediatric patients and must be both reviewed and approved by the PDBNS Registrar.
- b) Dr. Knoll is required to adhere to the following restrictions on her license:
 - > For patients aged 3 and under mild sedation only and only for ASA I and II patients.
 - > For patients aged 4 and over mild, moderate, and deep sedation and only for ASA I and II patients.
- c) Dr. Knoll will remit to the PDBNS the sum of \$5,000 on or before January 31, 2023 as a contribution to the PDBNS's costs to investigate the complaint.

Confidentiality

If, for any reason whatsoever, this Settlement Agreement is not recommended by the Complaints Committee, or is recommended by the Complaints Committee but not

accepted by the Discipline Committee, there shall be no reference to this Settlement Agreement or any admissions contained herein in any subsequent proceeding or hearing under the *Act*, and the terms of this Settlement Agreement will not be disclosed to any person, except with the written consent of both the PDBNS and Dr. Knoll or as may be required by law.

THIS SETTLEMENT AGREEMENT made this 31 day of December, 2022.

Witness

Witness

Dr. Julie Knoll

Dr. Douglas Mackey, Registrar

Provincial Dental Board of Nova Scotia

Recommended by the Complaints Committee this 2 day of Feb , 2023, by Dr. Clare Champoux, Chair of the Complaints Committee.

Witness Danie

Or Clare Champoux

Chair

Complaints Committee

Accepted by the Discipline Committee this 4 day of APRIL, 2023 by Dr. Thomas Boyle, Chair of the Discipline Committee.

Witness

Cheryl Kozeys 2430 Armorescent WAve

Haliba NS

Dr. Thomas Boyle, Chair

Discipline Committee