



# PROMETEUS

preterm brain-oxygenation  
and metabolic eu-sensing

## D7.1 – Training video for interview

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### History of Changes

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## 1. Executive summary

This document is designed to address the first deliverable of the WP7: D7.1, titled “Training video for interview”, within the Prometheus Project.

The aim is to present the steps undertaken from M1 (February 2023) to M17 (July 2024) within the activities of WP7 which led to the development of a manual and a training video for conducting interviews. The performed interviews will subsequently become part of the Visual and Oral Archive of Prematurity (D7.4, titled “Visual & Oral Archive of Prematurity release”).

The creation of the Visual & Oral Archive of Prematurity is also the Milestone of the WP7, due on October 31, 2025.

The contents of this document are:

- a. A definition of the methodology used to gather information about the tools used in prematurity contexts and a high-level description of the process carried out to develop the assessment tools to use during data collection.
- b. A sequential outline of the steps taken to draft the narrative sessions' scripts and subsequently, derived from these sessions, the archive interview's scripts.
- c. A detailed description of a pilot study conducted to test the feasibility and accuracy of the narrative sessions' scripts.
- d. A collection of specifications regarding the archive interview, including the topic choice, the setting and a video training to conduct the interviews.



## 2. List of abbreviations

WP	Work Package
HCP	Healthcare personnel
NICU	Neonatal Intensive Care Unit
ICU	Intensive Care Unit
BDI-II	Beck Depression Inventory – Second Edition
STAI-Y	State-Trait Anxiety Inventory – Y form
PTSD	Post-traumatic stress disorder
PPQ	Perinatal PTSD Questionnaire
EPDS	Edinburgh Postpartum Depression Scale
PSS- NICU	Parental Stressor Scale – Neonatal Intensive Care Unit
PS-ICU	Perceived Stressors – Intensive Care Units
NPST	Nurse-Parent Support Tool
COPE	Coping Orientation to the Problems Experienced
CMM	Continuous Metabolic Monitoring
IPJM	Integrated Patient Journey Map
LDA	Latent Dirichlet Allocation
STM	Structural Topic Modeling
DPSS	Department of Developmental Psychology and Socialization
UCC	University College Cork

### 3. Methodology and process

The following section illustrates, in chronological order, the necessary steps followed to ultimately develop the Archive’s manual and the training video for conducting interviews.

WP7 has two objectives:

1. To develop tools to assess premature birth experience and the potential impact of Prometheus devices.
2. To create the first Visual and Oral Archive of Prematurity, containing the testimonies of parents and HCP regarding prematurity.

During the first year of the project, the objective of WP7 was to select and develop the assessment tools for data collection, as required by Task 7.1: “Development of assessment tool” (time window M1-M12).

As a final result of Task 7.1, Archive’s interviews scripts were developed to record the interviews and ultimately create the Archive of Prematurity.

#### 3.1. Review of the literature and development of the assessment tool

To accomplish Task 7.1, a review of the literature was initially conducted on PubMed in March 2023 (M2) to explore which protocols and types of assessments had been most commonly used with parents of preterm infants and HCP working in NICUs. In particular, an investigation was made into which constructs had been previously studied in these populations (e.g., stress, anxiety, depression, coping strategies) and which tools had been employed to assess them (e.g., standardised questionnaire, semi-structured interviews).

Given the considerable changes over the years regarding the definition of prematurity and the medical practices adopted in NICUs, the search was restricted to articles published from 2000 to 2023. The search string was as follows:

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((prematurity OR preterm birth OR preterm OR preterm infants) AND (neonatal intensive care units OR NICU)) AND (nurses AND (parents OR families)).
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The search produced 468 articles. An initial screening was conducted based solely on titles and abstracts, resulting in a selection of 100 articles for full-text review. In order to be included in the screening, the articles had to be peer-reviewed and published in English, with samples including parents of preterm infants (mothers, fathers, or both), or nurses and physicians working in NICUs, or a combination of both parents and HCP. All types of study designs (e.g. longitudinal, cross-sectional) were considered with the exception of case reports, unpublished manuscripts, commentaries, editorials, theses, and conference proceedings.

Data from the selected studies were extracted and synthesised using a table that contained the following information for each study: (a) study characteristics (authors, year of publication, study design); (b) population characteristics (population, sample size); (c) study objectives; and (d) methods. To update the results and include more recent publications, the search was repeated at the end of May 2024 using the same search string and screening methods. This search, restricted to articles published from 2023 onward, produced 57 articles. Of these, 16 were selected and included in a table containing the same information as the first search. The findings from the selected articles indicated that standardised questionnaires, semi-structured interviews, diaries, ad-hoc surveys, and focus groups were among the most commonly used tools.

Consequently, different assessment tools were chosen for Task 7.1 based on the literature findings.

- A. A battery of standardised questionnaires was selected, drawing from those referenced in the articles: STAI-Y (anxiety), BDI-II (depression), EPDS (postpartum depression), PPQ (perinatal PTSD symptoms), PSS-NICU (parental perception of stressors in NICU), and NPST (parental perception of nurses' support). Following discussions among WP7 partners (UCC and Unipd) through conference calls, emails, and meetings, three additional questionnaires were added to the selected battery: COPE (coping strategies), PERMA-profiler (psychological well-being) and PS-ICU (stressors in ICU).
- B. UCC also developed the Integrated Patient Journey Mapping tool and adapted it to the aims and the population of the project (parents of premature infants). The IPJM is a digital diary for the families that takes into consideration the physical and emotional path of each person to promote empathy and empowerment.
- C. Two tailored qualitative ad-hoc interviews were developed. The first interview was created with the aim of exploring the experiences of parents and HCP in the NICU setting, while the second was designed to investigate the potential impact of Prometeus devices, both the medical (neo-opticap and CMM) and the digital one (digital interface).
- D. A script to conduct narrative sessions was drafted and saved in two manuals (one for HCP, one for parents). Details about narrative sessions are provided in paragraph 3.2. "Script of the narrative sessions".

Additionally, brainstorming sessions involving various expert members from the Prometeus project followed, during which medical and technical expertise were combined to better define the questions of the two qualitative ad-hoc interviews (C) and review specific terminology used. The participants of the discussion considered:

- The targets of the interviews,
- The project's specific objectives,
- The utility of the collected information for the global project.

The partners involved and the topics discussed during the brainstorming sessions were:

Partners	Topics
Alberto Scarpa (DAVE)	Information about the appearance and the contents of the digital interface were gathered. Questions related to the usability and the appearance of the digital interface were reviewed.
Alfonso Galderisi (Unipd)	Information about the NICU environment were gathered. Questions related to the neo-opticap and the CMM in the HCP and parents' interviews were reviewed.
Daniele Trevisanuto (Unipd)	Information about the NICU environment were gathered. Questions related to the neo-opticap and the CMM in the HCP and parents' interviews were reviewed.
Gene Dempsey and Frédéric Adam (UCC)	Once all the suggestions were integrated, the HCP and parents' interviews were reviewed a second time among WP7 members.

The assessment tools developed will be used over a 4-month period during the data collection phase, referred to as Task 7.4: “Assessment and interview study for parents and HCP on device development”, scheduled for M14-M26 of the project timeline. Using the same protocol, Unipd and UCC will recruit 15 families and 5 HCP at each site. Data collection will occur longitudinally: four timepoints and one follow-up are planned for parents, while two timepoints, spaced four months apart, are planned for HCP, as shown in **Figure 1**.

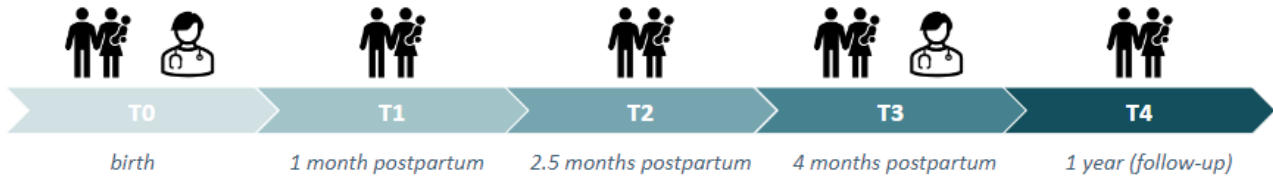


Figure 1: Timepoints of the longitudinal data collection.

- a) For parents, the longitudinal approach is intended to monitor changes in their experience in the months following a preterm birth, which, due to its unique challenges, often leads to significant family and contextual adjustments beyond those associated with a full-term pregnancy. This approach will help capture how these experiences evolve over time.
- b) For HCP, the longitudinal approach allows to observe and evaluate any developments or shifts in their perspectives and feedback throughout the study period.

Once the assessment tools were developed, Unipd submitted the full protocol to their Ethical Committee in order to obtain approval and start the data collection (Task 7.2: “Ethical Committee Approval for the interview collection”). Approval was received in April 2024 (univocal code: 111-c). Ethical Committee approval for UCC is still pending.

### 3.2. Script of the narrative sessions

Task 7.3: “Script for video recording” was the objective for the period M12-M17, and it addresses the scripts for the narrative sessions, aimed to explore parents and HCP’s experiences with prematurity, NICU environment, and medical devices.

Narrative sessions consist of longitudinal semi-structured interviews conducted separately with parents and HCP, repeated across four timepoints over a 4-months period. Two distinct scripts were drafted—one for HCP and one for families—detailing procedures to follow during Timepoint 0. For parents, T0 coincides with the child's birth, and the narrative session is conducted separately with each parent a few days after discharge, while for HCP T0 starts when they give their consent to participate in the study.

The script outlines the circumstances in which the encounter occurs, besides the details, the setting and the questions of the interview (**Figure 2**).





Table of Contents	Page
I. GREETINGS AND INITIAL DISCLAIMER.....	3
II. SET UP.....	4
III. OVERVIEW OF THE VISIT.....	4
IV. PART 1: MACRO EXISTENTIAL CONTEXT.....	5
V. PART 2: THE EXPERIENCE OF PRETERM BIRTH.....	6
VI. PART 3: THOUGHTS ABOUT NEW MEDICAL DEVICES	7
VII. CLOSURE.....	8
VIII. THANK YOU GIFT AND DEBRIEFING.....	8

Figure 2: Table of contents of the narrative session's script.

The narrative sessions can be held either online or in-person per the participant's preference. For ethical research standards, a chosen external person has to be present in the residence if the meeting is conducted at home. In-person meetings are conducted in a designated setting ensuring uninterrupted, quiet surroundings with amenities like water and tissues. The session is audio-recorded using microphones strategically positioned to minimise external noise and turned towards the respondent. If conducted online, a private link for a Zoom room is sent, along with recommendations regarding camera and microphone settings, lighting in the room, and a request to be alone and not interrupted during the meeting. The meeting is recorded using Zoom options, but only the audio files are maintained afterwards. Before recording, participants are reminded of the meeting nature with reassurance of their right to abstain from answering questions without any explanation. It is also mentioned that at the end of the interview the purpose of the meeting will be explained in more detail and further clarifications can be provided if necessary. Once any doubts have been clarified, they are asked if they are ready to start the recording.

- a. **Parent's narrative session at T0.** The interview is divided into three sections, defined according to the topics covered. The first part concerns the macro existential context of the individual, in which questions are asked about the person's private life (such as age, occupation, living arrangements). This is followed by questions regarding their caregiving experiences, such as whether they are currently taking care of someone, like an elderly relative or a child, and if so, whether they receive any assistance in this role. The second part pertains to the experience of pregnancy and childbirth, with a prompt to share the events freely. If something is unclear, the interviewer may ask questions to better understand the participant's perspective, and if certain aspects are not sufficiently explored, probing questions are used to gather additional details and further frame the emotional and psychological experiences during those times. Besides, if certain key areas are not addressed voluntarily by the participant, the interviewer explicitly asks about these, such as their relationship with medical staff, the perceived support, and the specific duration of events (e.g., hospital stays). Once the matter is sufficiently explored, the interview proceeds with the third part, which contains questions related to medical equipment, both those seen and experienced in the hospital during their and/or their newborn's stay, and those currently being developed as prototypes for the Prometheus research project. The questions regarding



Prometheus devices focus on the potential visual and emotional impact these medical devices might have according to the parent, and any suggestion regarding these prototypes. Once the third part of the interview is concluded, the participant is asked if there was anything they would like to add. The recording is then stopped, and the interviewer provides a debriefing on the project, specification about the medical and digital devices being developed by Prometheus, and the objectives related to the discussed topics. The participant is thanked for their participation and asked if they have any further questions. At the end, a small thank-you gift is given, and the next narrative session is arranged.

**Parent’s narrative session** will be also conducted at **T1-T2-T3**.

- b. **HCP’s narrative session**. The script addressed to HCP is similarly structured, with some differences concerning one of the three sections of the interview. The first and the third part remain unchanged, while the second part—regarding the experience of prematurity—focuses more on their work in the NICU as professionals, and their interactions with families and preterm infants. The terminology used is also more technical compared to the interview with parents, as it is addressed to specialists in the medical field.

**HCP’s narrative session** will be also conducted at **T3**.

The scripts were saved into two English manuals and shared with UCC partners for independent use, although Unipd members of WP7 are expected to travel to Cork (UCC) by the end of the year to conduct the first narrative session.

### 3.3. Narrative sessions at T1-T2 and T3

Scripts for conducting the narrative sessions at the different timepoints were developed by evolving the T0 scripts.

For parents, the questions were modified focusing on emotional and experiential changes since the prior session, with the goal of monitoring the dynamics involving the baby’s development, family adjustment, and the social context. Example of questions include: “Can you describe the changes you lived during this time?”; “How did you feel during the transitional care process?”; “Has the relationship with your baby changed over the past few months?”.

For the HCP, the questions were more general and focused on both personal and professional levels, such as: “Can you describe the changes you lived during this time?”; “Have there been any changes in your personal situation since the last time we met?”.



### 3.4. Script of the Archive of prematurity interview

The narrative sessions’ scripts were essential in laying the groundwork for the Archive of prematurity interview, as they aimed to delve into the central themes of the premature experience, targeting both families and HCP. Archive interviews’ scripts were adjusted based on the narrative sessions’ scripts and saved with the following table of contents (**Figure 3**):

Table of Contents	Page
I. DECISION ON THE TOPIC.....	3
II. GREETINGS AND INITIAL DISCLAIMER.....	3
III. SET UP.....	4
IV. OVERVIEW OF THE MEETING .....	5
V. INTERVIEW.....	6
VI. CLOSURE AND DEBRIEFING.....	7

*Figure 3: Table of contents of the archive interview's script.*

The interview for the Archive of prematurity takes place between T2 (2.5 months after birth) and T3 (4 months after birth) for parents, and after T3 (4 months after recruitment) for HCP. As mentioned above, the narrative sessions aim to delve into the central themes of the premature experience, targeting both families and HCP. After conducting several narrative sessions, it will be possible to select, through topic modeling analysis (further details provided in section 4.3: “Data preprocessing and analysis”), the most recurring and significant themes for both families and HCP. These topics will then be discussed with the participants during a preparatory meeting for the archive interview, where the assigned topic of the interview and related questions will be agreed upon. Information about the interview structure, the topic choice and setting specifications are given in paragraph 5: “Interview for the Archive of prematurity”.

## 4. Pilot study on the experiences of mothers with preterm infants

Unipd conducted a pilot study to test the feasibility and accuracy of the narrative sessions' script and to develop the R script to use during the data collection.

### 4.1. Study population

The participants were 13 mothers who had a premature birth (<36 weeks). The mothers' age ranged between 33 and 62 years ( $M=39,3$ ), while the gestational ages of the infants ranged from 28 weeks and 1 day to 36 weeks and 6 days ( $M= 33$  weeks). Ten of the mothers had given birth to twins. Six of the mothers had late preterm infants (34 to 37 weeks), three had moderately preterm infants (32 to 34 weeks) and four of them had very preterm infants (28 to 32 weeks). Eight mothers had one or two infants (if twins) hospitalised in the neonatal intensive care unit (NICU). The inclusion criteria were having had a premature birth and being a native Italian speaker.

No specific post-partum period was defined *a priori*, therefore the children's ages at the time of the interview varied from 5 months to 26 years. Participants were recruited through free social network advertisements. Before taking part in the study, they were fully briefed and provided a written informed consent, which was sent back signed by those who decided to participate. Each participant was associated with an identification code to protect their privacy and identity.

The procedure was approved by the ethical committee of the University of Padua (univocal code: 5408).

### 4.2. Procedure

Data collection lasted approximately 10 months, from May 2023 to March 2024, until no new information was gathered. The script of the narrative session, previously presented, was used to collect the data. The purpose of the narrative session was to bring out spontaneous nuclei of meanings related to the parental experience of prematurity and to investigate the parents' thoughts about using new medical devices on their infant's body. Thirteen narrative sessions were conducted in Italian using the Zoom platform at a time of the participant's choice. They were asked to choose a quiet room where they could talk without distractions and interruptions.

At the beginning of each narrative session, the experimenter explained the purpose of the research, the approximate duration of the meeting and the use of a numeric code to protect the participant's identity. Then, a reminder about the voluntary nature of participation in the study and the possibility to withdraw from the research at every moment was given before starting the recording. The narrative sessions, which lasted approximately 30 to 55 minutes, were audio-recorded, converted in mp3 and then transcribed. An automatic transcription was carried out using the Google console "Cloud Speech-to-Text". Subsequently, the transcriptions were reviewed for accuracy and manually corrected by one of WP7 members. Lastly, the interviewer's and participant's utterances were separated by speaker and the interviewer's speech was removed from the analysis.

### 4.3. Data preprocessing and analysis

The transcriptions were saved in a single CSV document and imported in R (R Foundation for Statistical Computing). All text mining was performed using RStudio Version 2023.09.1 +494.



- A. The preprocessing step consisted in tokenizing the text using “*unnest\_tokens*” from the *tidytext* package, which consists of breaking a stream of textual data into single terms called tokens. Then, the *stopwords* package was used to remove stop words (e.g., “and”, “or”, “the”) from the tokens. Since the preexisting Italian database contained a limited number of stop words, a new one was created including any term that needed to be removed.
- B. Two different types of analyses were chosen to be performed on the data: sentiment and emotion analysis and topic modeling analysis. Sentiment and emotion analyses were performed on the data utilising the specific function “*get\_nrc\_sentiment*” from the *syuzhet* package, which extracted sentiments using one of the four sentiment dictionaries included in the package. The function calculates the presence of eight different emotions (i.e., anger, anticipation, disgust, fear, joy, sadness, surprise, and trust) and one of three overall sentiments (i.e., positive, negative, or neutral) to each word. The data was then subjected to topic modeling analysis with Latent Dirichlet Allocation (LDA, developed by Blei, Ng, & Jordan, 2003), to reveal frequent topics on participants’ narration by analysing the probability and distribution of all words in all interviews. LDA was performed using the *topicmodels* package. Since the LDA algorithm requires manual input of the number of topics (called *k*), the algorithm was run several times varying *k* from 3 through 8, and 6 was chosen as the topic number for the final model. The topic model with 6 topics struck a balance between one narrow selection, that risked losing important tokens, and one too broad, that risked losing the main focus.
- C. Finally, *ggplot2* was used to visualise the top 10 terms of each topic.

#### 4.4. Results

Sentiment analysis provides insights into the overall sentiment expressed by the participants and the polarity of these emotions, with the aim to use this information when topics will be analysed longitudinally.

Emotion analysis results: Overall, the percentage of positive emotions was higher than the percentage of negative emotions (**Figure 4**).

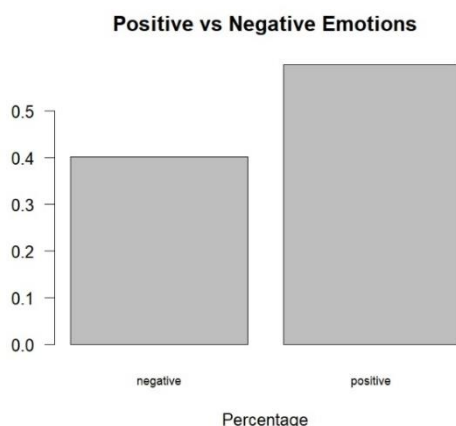


Figure 4: Percentage of positive and negative emotions

Sentiment analysis results: More words were associated with positive emotions, in particular “trust”, but the second most prominent emotion was “fear” (**Figure 5**).

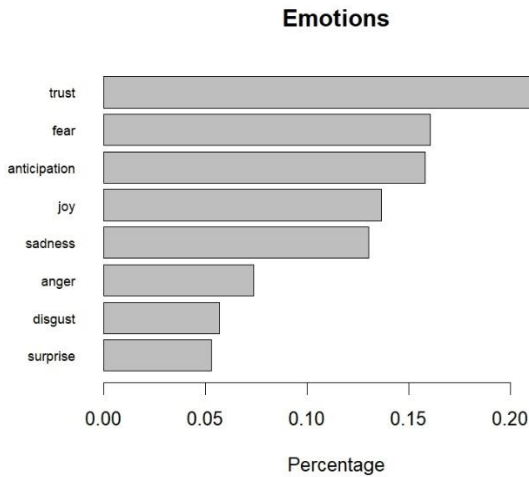


Figure 5: Percentage of emotions: positive (trust, joy, surprise, anticipation) and negative (fear, sadness, anger, disgust)

**LDA results:** A topic model with 6 topics was chosen. Each term had a specific probability of being assigned to each identified topic. This means that each topic shown in **Figure 6** is characterised by a set of terms with high probabilities, reflecting the concept or theme of the topic. It is possible to note how the terms are distributed across the topics, highlighting the most representative terms for each thematic group. LDA was applied to Italian texts, therefore an English translation is presented below in **Table 1**.

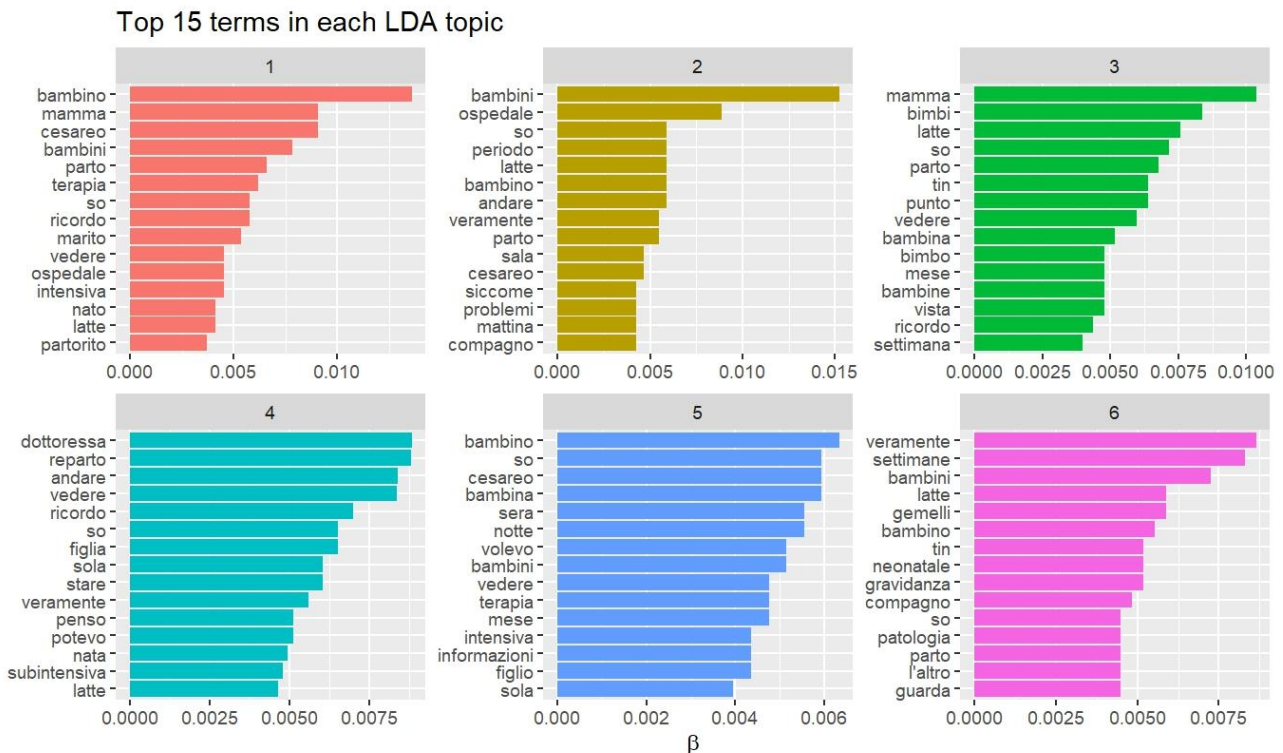


Figure 6: Example of LDA topics using a k=6. For each LDA topic were extracted the top 15 terms



Topic 1	kid, mum, caesarean, kids, childbirth, therapy, know, remember, husband, see, hospital, intensive, born, milk, delivered.
Topic 2	kids, hospital, know, period, milk, child, go, really, childbirth, room, caesarean, since, problems, morning, partner.
Topic 3	mum, babies, milk, know, childbirth, NICU, point, see, kid, baby, month, kids, view, remember, week.
Topic 4	doctor, ward, go, see, remember, know, daughter, alone, stay, really, think, could, born, sub intensive, milk.
Topic 5	kid, know, caesarean, kid, evening, night, wanted, kids, see, therapy, month, intensive, information, son, alone.
Topic 6	really, weeks, kids, milk, twins, kid, NICU, neonatal, pregnancy, partner, know, pathology, childbirth, other, look.

Table 1: English translation of the top 15 terms in each LDA topic.

#### 4.5. Rationale behind the choice of Topic Modeling analysis (LDA)

Regarding topic modeling, this method enables the identification of recurring and prominent themes, called topics, within numerous documents, along with the words most likely to fall within each topic. This facilitates summarization and a deeper understanding of the text, revealing underlying patterns and structures that may not be immediately apparent through other means. By combining these two analyses—sentiment analysis and LDA topic modeling—the aim was to achieve a comprehensive exploration of both the emotional landscape and the thematic content within the dataset, thereby gaining a nuanced perspective on the data's complexities. This dual approach enhanced the possibility to derive meaningful insights and conclusions from the gathered information.

The reason LDA was chosen to perform topic modeling is because it is the most widely used algorithm among topic modeling techniques due to its simplicity and efficiency in R. However, LDA does not facilitate the monitoring of the progression and evolution of topics over time, which is a critical aspect for Prometheus study.

## 5. Interview for the Archive of prematurity

The second objective of WP7 is the creation of the Oral and Visual Archive of Prematurity, which corresponds to deliverable D7.4: “Visual & Oral Archive of Prematurity release”, scheduled for 31/07/2025. The Archive of Prematurity creation will provide support and a sense of community for HCP and new parents experiencing prematurity, while also informing developers of medical devices. It will comprise the testimonies of parents and HCP regarding their experience with prematurity, which will be collected through short interviews.

To ensure the relevance and depth of these interviews, narrative sessions are conducted at various timepoints to explore the central themes of prematurity for both parents (T0-T1-T2-T3) and HCP (T0 and T3). These sessions are essential for gathering a comprehensive range of themes, which will be then analysed using topic modeling to identify the most significant ones.

The algorithm used will transition from LDA to Structural Topic Modeling (STM). STM enables the incorporation of the time covariate, which is crucial for observing temporal changes in topics. This longitudinal approach provides a deeper insight into how topics evolve over time and, most importantly, will inform the selection of topics to be addressed during the interviews for the Archive of Prematurity, ensuring that only the most pertinent topics are included. Further details about the topic choice are illustrated in the next section 5.1: “Topic choice”.

### 5.1. Topic choice

As previously mentioned, parents will be interviewed for the Archive of prematurity between T2 (2.5 months postpartum) and T3 (4 months postpartum), while HCP will be interviewed after T3 (4 months after recruitment). This scheduling decision was based on two considerations. The first is that by scheduling the interview between timepoints and not at the end of the entire protocol the risk of drop-out is minimised, at least among parents. Secondly, this approach ensures that there will have been three narrative sessions with the parents (at T0, T1, and T2), and two narrative sessions with HCP (T0 and T3). This will allow us to extract the topics that have emerged and to monitor their evolution over time using the topic modeling analysis, which will be performed using STM on the narrative sessions’ transcriptions. Once the most significant topics have been identified, an online meeting or phone call will be arranged with each participant to collaboratively select a topic of discussion for their interview and establish specific questions.

This will allow participants to prepare their responses and ensure they are comfortable with the questions that will be posed during the interview. Finally, the interview is scheduled at the most appropriate time for them.

### 5.2. Interview details

There are three fundamental differences that distinguish the interview for the Archive of prematurity from the narrative sessions. First, if the participants are parents, they are interviewed together as a couple and as co-parents, unlike the narrative sessions where they were interviewed individually. Second, participants can decide to consent to either audio and video recording or audio recording only, while during narrative sessions only audio is recorded. Lastly, the interview is conducted exclusively in person in the chosen setting, unlike the narrative sessions that could also be conducted via Zoom. The rationale behind this choice is that, since the interviews will become part of a public archive, it is necessary to have a consistent setting and total control over the quality of



both the audio and video.

- The interview follows the table of contents shown in section 3.4: “Script of the Archive of prematurity interview”.
- The script outlines the process of topic selection, the circumstances of the encounter, the setting and the questions asked during the interview.
- Participants are greeted at the entrance of the University (DPSS in Padua and UCC in Cork). During the meeting, which lasts approximately 45 minutes, participants partake in a 15-minute recorded interview.
- Upon arrival, participants are escorted to a designated and well-equipped interview room (referenced in section 5.3: “Interview room specifications”). After showing them to their seats, the researcher reviews the purpose of the meeting, the interview duration and the methodology that will be adopted, ensuring clarity and setting expectations. The researcher also emphasised that they could pause the registration if necessary. The research asks if there are any doubts and if they are ready to start, pointing out that at the end of the interview there will be time to provide additional details and clarifications if needed. This initial exchange gives them time to chat and get more comfortable before the formal interview begins. Every effort should be made to be relaxed and friendly and to put participants at ease.
- The interview follows a set of probing questions designed to explore the topic chosen during the phone call. Examples of probing questions include: “Can you explain better what you mean with that?”; “How did you feel in that moment?”; “How long/how often did that situation happen?”.

### 5.3. Interview room specifications

In this section, the room setup at the Unipd headquarters, where the interview for the archive will take place, is shown. The photos of the room will serve as a guide for UCC and will be included in the training video (more details below) to ensure that the same setup is configured at their headquarters.

The interview is conducted in a designated setting ensuring uninterrupted, quiet surroundings with amenities like water and tissues. The interview is video and audio-recorded using cameras and microphones strategically positioned to minimise external noise and guarantee a good quality of the recording.

The setup is prepared before the arrival of the participants. The chairs must be positioned facing each other. In the case of interviewing parents, two chairs are placed side by side, with the interviewer's chair positioned directly opposite to them, as shown in **Figure 7**.



Figure 7: designated room for the archive of prematurity interview.

In the room, there are a total of three cameras and two microphones, one above the participants and one above the interviewer. **Figures 8, 9** and **10** show the cameras and microphones appearance. If the participants have consented to being filmed, the camera will be directed to capture their faces, otherwise it will be turned off before they arrive at the university.



Figure 8: First arrow points to camera one, facing the participants. Second arrow points to the microphone.



*Figure 9: camera two, facing the interviewer.*



*Figure 10: Close-up of the microphone.*



In a small room adjacent to and connected with the recording room, an electrical control unit (**Figure 11**) manages both the cameras and microphones, allowing for camera rotation and sound adjustment. A monitor displays a Multiview of the camera feeds from the room (**Figure 12**).



Figure 11: Electrical control unit.



Figure 12: Computer monitor showing a Multiview of the camera feeds.

## 5.4. Training video for interview recording

The manual was created for conducting interviews for the Archive of prematurity. This manual, saved from the script described in section 3.4: “Script of the Archive of prematurity interview,” details the content covered in sections 5.1: “Topic choice” and 5.2: “Interview details”.

The training video for conducting the interviews include video instructions on the following aspects:

- A. **Room appearance and setting:** The video will guide UCC on how to replicate the room's appearance and setup where the interviews will be conducted. Photos of the room used at Unipd are presented in the previous section (5.3: “Interview room specifications”) to ensure that the same setup is implemented at UCC.
- B. **Final recorded output:** The video will illustrate how the final recorded product should appear once the interview is conducted. Since participants can choose to consent to either video or audio recording, there will be two types of outputs for the Visual & Oral Archive of Prematurity:
  - a. **Video Recording:** In cases where participants consent to video recording, the output will include the actual video recording of the interview with audio in either English or Italian (depending on whether the interview is conducted in Cork or Padua). This video will contain subtitles in five languages: Italian, French, Spanish, English, and Hebrew, corresponding to the languages spoken by the five Prometheus project partners.
  - b. **Audio Recording:** For participants who do not consent to video recording, the output will consist of slides featuring drawings and images related to the theme of prematurity, overlaid with the original interview audio and subtitles in the various languages.



Two examples of the output frames that will be uploaded to the Archive of prematurity are available in **Figures 13** and **14**, showing the versions with and without video, respectively.



Figure 13: Frame of the video with both video and audio recording.



Figure 14: Frame of the video without video recording.