



**NAME:** Elderly care 

**DATE:** May 15, 2026 1:43 PM


**DESCRIPTION OF TECHNOLOGY**  
 The administrative pressure in elderly care has intensified, limiting the time caregivers spend with patients and reducing the quality of care. The proposed solution is an AI-powered speech-to-text system using a Large Language Model (LLM) aims to streamline documentation by converting spoken interactions into structured clinical information following Dutch ZIB standards

**HUMAN VALUES** 

Enhances autonomy by reducing paperwork.

Supports dignity by reducing burnout and administrative overload.


Makes their job feel more meaningful (more human contact, less typing).

**TRANSPARENCY** 

Caregivers receive onboarding explaining how recording, transcription, ZIB structuring, and deletion works.

Patients are informed about the purpose and their rights (WGBO Article 448 on informed consent).


Transparency indicators show when audio capture is active.

**IMPACT ON SOCIETY** 

The core problem is the excessive administrative burden on elderly-care professionals, who currently spend a disproportionate amount of their working time on writing reports, daily notes, progress updates, and care-plan documentation. Dutch elderly-care institutions consistently report that nurses spend 2540% of their time on documentation instead of direct patient care.

**STAKEHOLDERS** 


- patients
- caregivers
- Nurses

**SUSTAINABILITY** 


Lightweight local processing where possible

Deleting audio instead of storing large files


No large-scale training on real patient data

**HATEFUL AND CRIMINAL ACTORS** 

Privacy violations, Fraud / identity misuse, Harassment or surveillance, Bypassing accountability, Mitigations already designed in

**DATA** 


Caregivers speak from different perspectives human approval ensures subjective interpretations are corrected. AI cannot replace clinical judgment; human oversight is mandatory. Caregivers with softer voices, accents, or speech disorders may experience lower transcription accuracy the system includes tuning for accent robustness.

**FUTURE** 


Standardized clinical documentation nationwide

More humane elderly care

Interoperability with national ZIB-based systems

**PRIVACY** 

Yes but minimally and carefully. The system processes the following personal data: Personal data processed, Caregivers voice during recording (not retained), Transcribed text of what the caregiver says, Information about the patients condition, behavior, care activities (health data = special category under GDPR)

**INCLUSIVITY** 

Accent bias (Dutch dialects, Spanish accents, Turkish accents)


Gendered voice bias (many models perform better with male voices)

Care context bias (LLMs may over-formalize or misinterpret colloquial nursing terminology)

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**HUMAN VALUES** 

**How is the identity of the (intended) users affected by the technology?**

To help you answer this question think about sub questions like:

- If two friends use your product, how could it enhance or detract from their relationship?
- Does your product create new ways for people to interact?...

**TRANSPARENCY** 

**Is it explained to the users/stakeholders how the technology works and how the business model works?**

- Is it easy for users to find out how the technology works?
- Can a user understand or find out why your technology behaves in a certain way?
- Are the goals explained?
- Is the idea of the technology explained?
- Is the technology company transparent about the way their...

**IMPACT ON SOCIETY** 

**What is exactly the problem? Is it really a problem? Are you sure?**

Can you exactly define what the challenge is? What problem (what 'pain') does this technology want to solve? Can you make a clear definition of the problem? What 'pain' does this technology want to ease? Whose pain? Is it really a problem? For who? Will solving the problem make the world better? Are you sure? The problem definition will help you to determine...

**STAKEHOLDERS** 

**Who are the main users/targetgroups/stakeholders for this technology? Think about the intended context by...**

When thinking about the stakeholders, the most obvious one are of course the intended users, so start there. Next, list the stakeholders that are directly affected. Listing the users and directly affected stakeholders also gives an impression of the intended context of the technology.

...

**SUSTAINABILITY** 

**In what way is the direct and indirect energy use of this technology taken into account?**

One of the most prominent impacts on sustainability is energy efficiency. Consider what service you want this technology to provide and how this could be achieved with a minimal use of energy. Are improvements possible?

**HATEFUL AND CRIMINAL ACTORS** 

**In which way can the technology be used to break the law or avoid the consequences of breaking the law?**

Can you imagine ways that the technology can or will be used to break the law? Think about invading someone's privacy. Spying. Hurting people. Harassment. Steal things. Fraud/identity theft and so on. Or will people use the technology to avoid facing the consequences of breaking the law (using trackers to evade speed radars or using bitcoins to launder...

**DATA** 

**Are you familiar with the fundamental shortcomings and pitfalls of data and do you take this sufficiently into...**

There are fundamental issues with data. For example:

- Data is always subjective;
- Data collections are never complete;
- Correlation and causation are tricky concepts;
- Data collections are often biased;...

**FUTURE** 

**What could possibly happen with this technology in the future?**

Discuss this quickly and note your first thoughts here. Think about what happens when 100 million people use your product. How could communities, habits and norms change?

**PRIVACY** 

**Does the technology register personal data? If yes, what personal data?**

If this technology registers personal data you have to be aware of privacy legislation and the concept of privacy. Think hard about this question. Remember: personal data can be interpreted in a broad way. Maybe this technology does not collect personal data, but can be used to assemble personal data. If the technology collects special personal data (like...

**INCLUSIVITY** 

**Does this technology have a built-in bias?**

Do a brainstorm. Can you find a built-in bias in this technology? Maybe because of the way the data was collected, either by personal bias, historical bias, political bias or a lack of diversity in the people responsible for the design of the technology? How do you know this is not the case? Be critical. Be aware of your own biases....

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