

Concept, qualitative research-based visualisation tool for urodynamics

T.R.F. van Steenberg, A.L. Poolen, W. van Dort, M.I.A. Wyndaele

University Medical Center Utrecht, Netherlands

Rationale: Urological health literacy

- Support clinicians explaining urodynamic findings
- Enhance patient understanding

Method: Qualitative needs assessment approach

Semi-structured interviews

- 6 patients:
 - understanding LUT (dys)function
 - information needs
 - added value of visualisations
- 5 clinicians:
 - current explanation content
 - which dysfunctions visualized
 - difficult concepts
 - important characteristics of a tool

Analysis

Interview transcripts

Matrix of questions vs summarised answers

Coding of answers (barrier, risk, etc.)

Themes derived of recurrent codes (multiple individuals)

Translating themes into **design requirements**

Results

Requirements (must-have)	
High evidence	Medium evidence
Show a reference model of normal anatomy & physiology.	Include basic anatomical labels at minimum.
Side-by-side comparison between normal function and dysfunction.	Feature selection drop-down menu for selecting dysfunctions.
The visualisation shall be presented in an animation.	Activating a toggle changes the visual state of the animation
Show the functional components: storage and voiding.	Shall be available in a suitable format for in-consultation use.

