Exploring how individuals with gout experience an eHealth supported collaborative care model: An explanatory sequential mixed methods study

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Background

Quality of care in gout is **suboptimal** with poor monitoring of serum uric acid (SUA), medication up-titration, and dietary advice.

Objective

To apply a mixed methods approach to evaluate the Virtual Gout Clinic (**VGC**), a **decentralized collaborative care** model involving rheumatology, pharmacy and dietetics, supported by **shared EMR.**

Virtual Gout Clinic
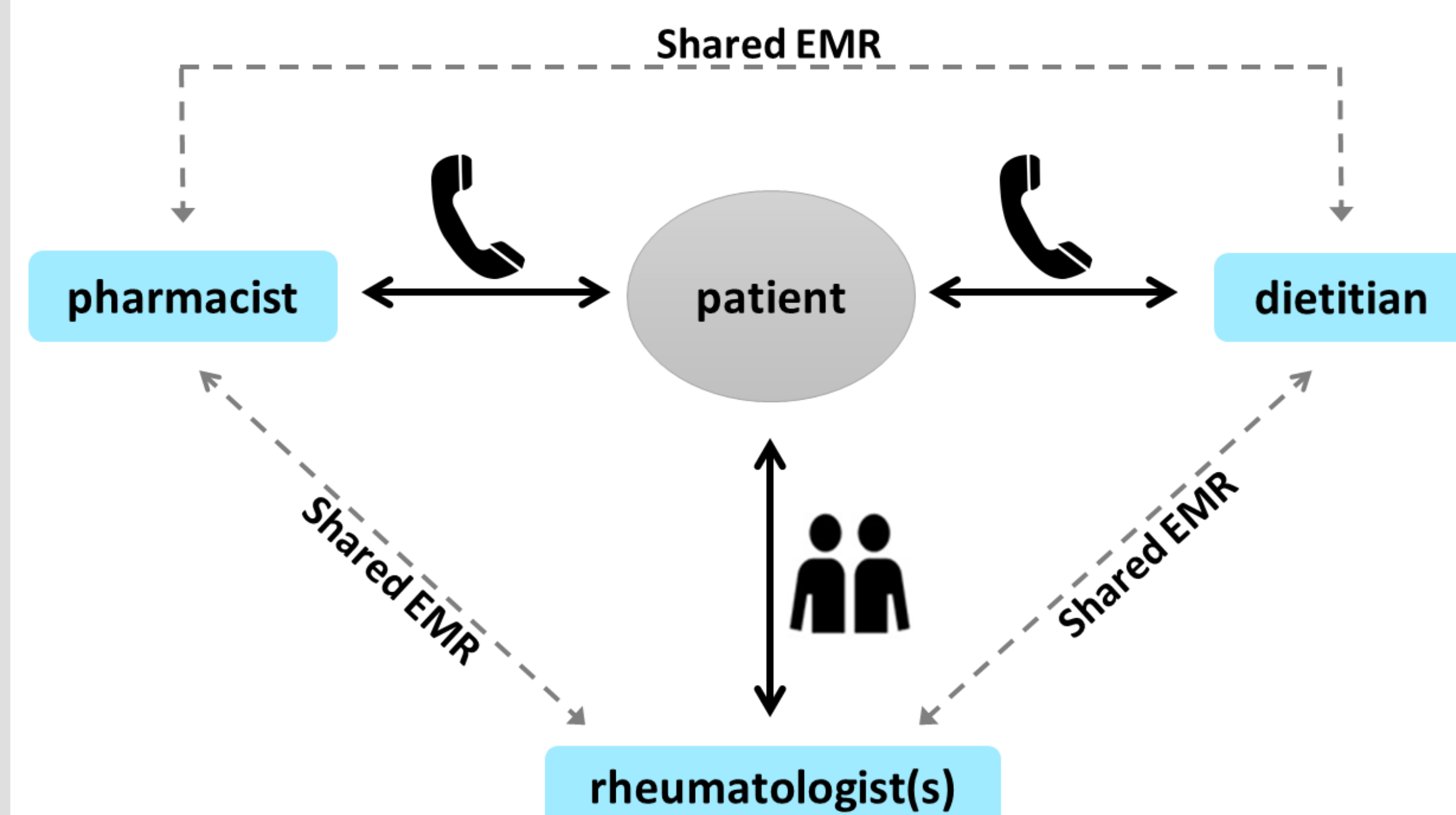
8 Rheumatologists in 4 participating practices across BC
-see gout patients in-person as needed basis

Pharmacist
-provides monthly medication management via phone, titrate medications, order and assess lab results, monitor adherence

Dietitian
-provides one phone counselling session on diet and lifestyle

Shared EMR
-facilitate provider communication and data collection for evaluation

Methods

Explanatory sequential mixed methods

Step 1: Quantitative

- <u>Design</u>: 1-year proof-of-concept observational study
- <u>Outcomes</u>: SUA and medication adherence (Compliance Questionnaire Rheumatology 5-item [CQR5]) at 1 year

Step 2: Data integration

- Purposeful selection of VGC patients
- Quantitative results inform interview guide

Step 3: Qualitative

- <u>Design</u>: Constructivist grounded theory
- <u>Data Gathering</u>: One-on-one semi-structured interviews

Step 4: Data integration

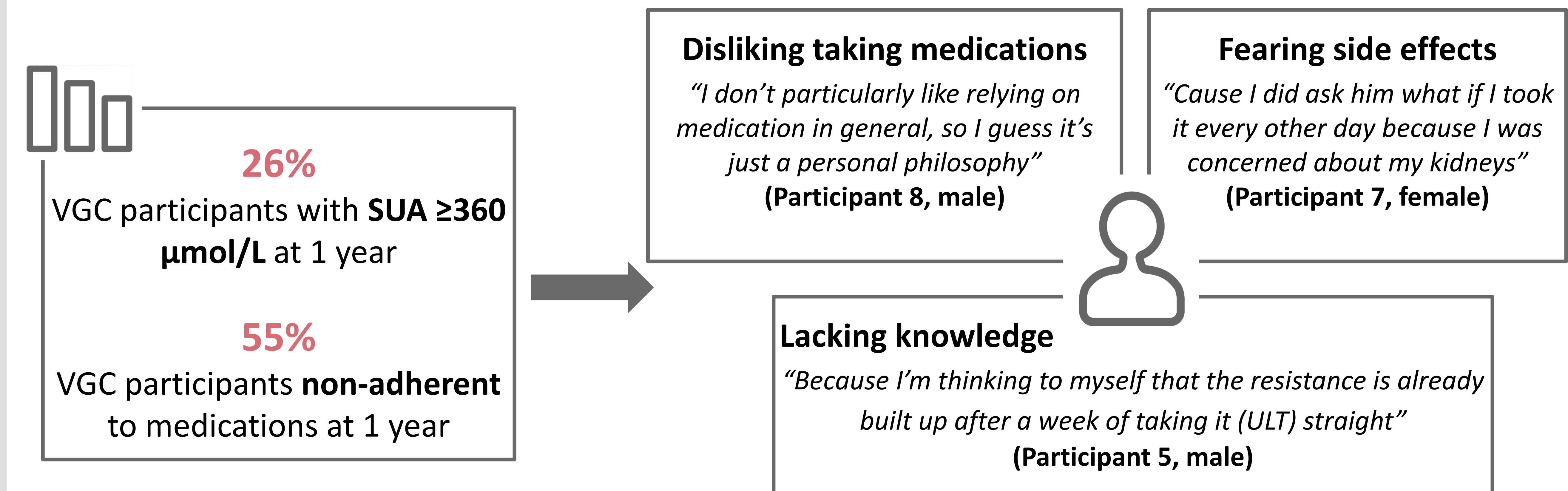- Combine quantitative and qualitative data for interpretation

Results

Table 1. Participant Characteristics

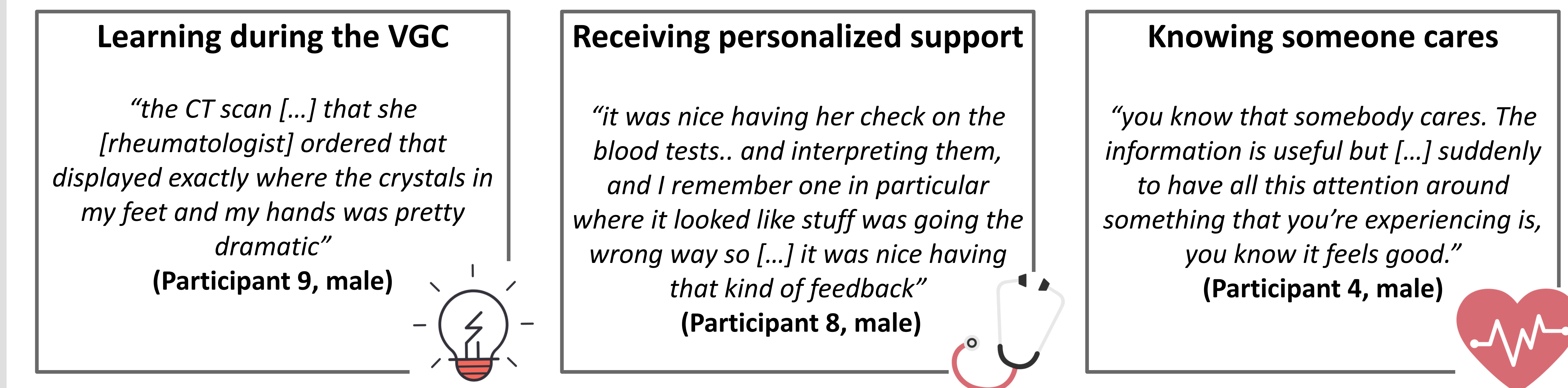|	VGC	Interview
Participants (N)	35	12
Male (N(%))	30 (86%)	10 (83%)
Baseline SUA (mean)	455 µmol/L	462 µmol/L
1 year SUA (mean)	346 µmol/L	387 µmol/L

- 4 interview participants were above target SUA (360 µmol/L) and 3 characterized as non-adherent (CQR5)

Results

Explaining quantitative results of the VGC

26%
VGC participants with **SUA ≥360 µmol/L** at 1 year

55%
VGC participants **non-adherent** to medications at 1 year

Disliking taking medications
"I don't particularly like relying on medication in general, so I guess it's just a personal philosophy"
(Participant 8, male)

Fearing side effects
"Cause I did ask him what if I took it every other day because I was concerned about my kidneys"
(Participant 7, female)

Lacking knowledge
"Because I'm thinking to myself that the resistance is already built up after a week of taking it (ULT) straight"
(Participant 5, male)

Describing participant experiences with the VGC

Learning during the VGC

"the CT scan [...] that she [rheumatologist] ordered that displayed exactly where the crystals in my feet and my hands was pretty dramatic"
(Participant 9, male)

Receiving personalized support

"it was nice having her check on the blood tests.. and interpreting them, and I remember one in particular where it looked like stuff was going the wrong way so [...] it was nice having that kind of feedback"
(Participant 8, male)

Knowing someone cares

"you know that somebody cares. The information is useful but [...] suddenly to have all this attention around something that you're experiencing is, you know it feels good."
(Participant 4, male)

Conclusion / Implications

- An eHealth supported (shared EMR) decentralized collaborative care model is a promising approach to improve care for gout.

- Persistent barriers in gout management suggest the need for ongoing patient support beyond the initial diagnosis.

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