

Do Hospital Staff Benefit from Remote Monitoring of Patients Receiving Oral/Intravenous Cancer Treatments? Results from the Minerva Study

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Rationale and design

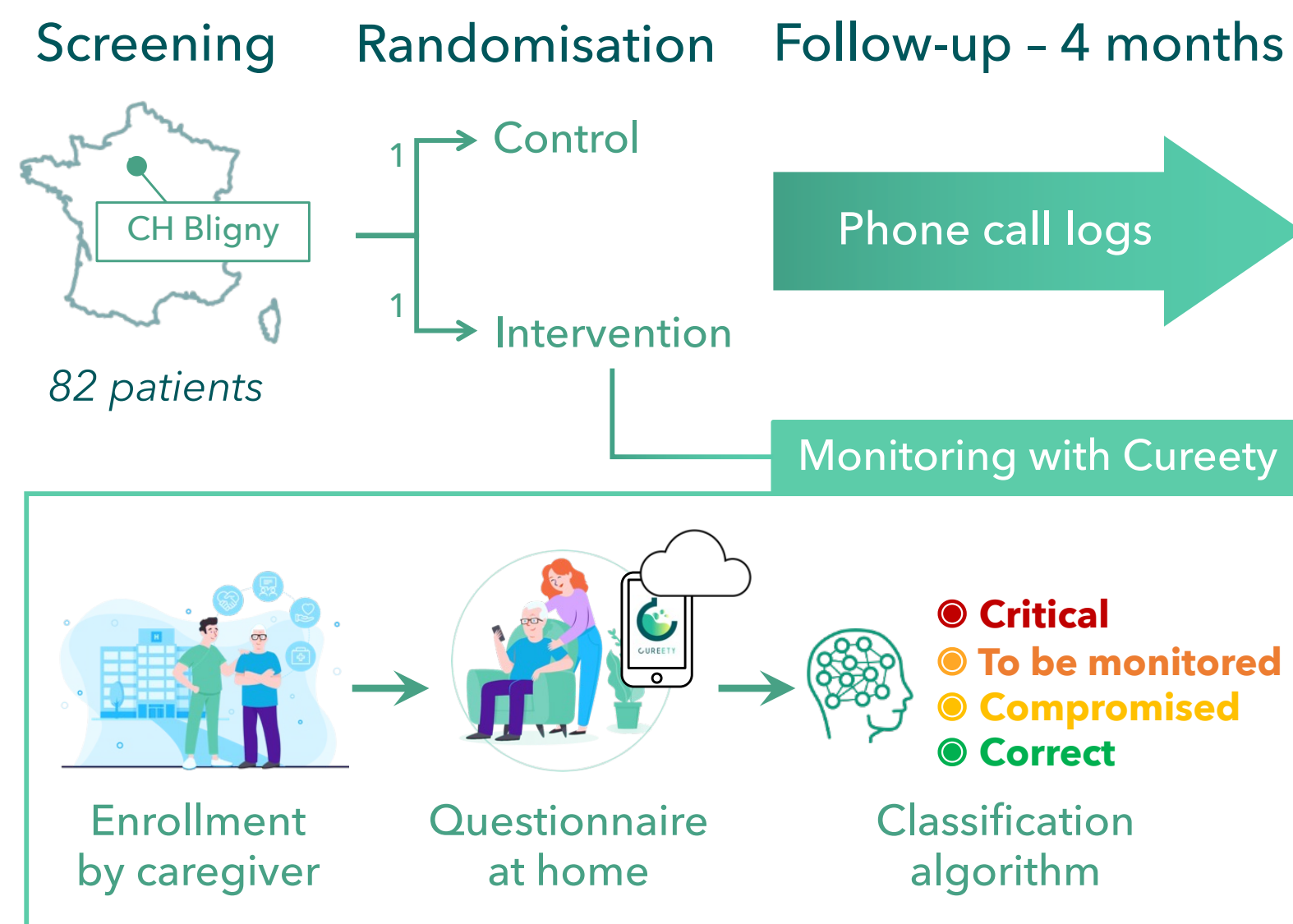
Remote monitoring of cancer patients is known to improve survival by allowing early reporting and management of adverse events^{1,2}. Based on the evidence of clinical benefits, recent ESMO guidelines recommend the use of digital tools collecting adverse events (AEs) for remote patient monitoring (RPM) in oncology. RPM could also benefit hospital staff by facilitating care prioritization and optimizing treatment scheduling but evidence in this area remains limited.

The digital RPM solution Cureety³ has been deployed in French hospitals since 2019. Monitored patients are prompted to complete a weekly PRO questionnaire personalized to their treatment and disease. Based on the adverse events, the Cureety TechCare algorithm computes a «clinical classification» with 4 levels, **red**, **orange**, **yellow**, **green** (most to least at-risk). The care team can then prioritize **red** & **orange** patients to provide targeted care if needed.

The MINERVA study is a prospective, randomized, single-center study designed to assess RPM benefits for staff and patients. We present here an interim analysis of the first 62 patients.

(1) Basch et al. *Jama* 318(2):197-198, 2017; (2) Basch et al. *Cancer Med.* 9(21):7797-7799, 2020; (3) Meghrief et al. *JMIR Cancer* 8(1), 2022

Figure 1. Study schema



Results

Patients

Figure 2. Disposition of patients

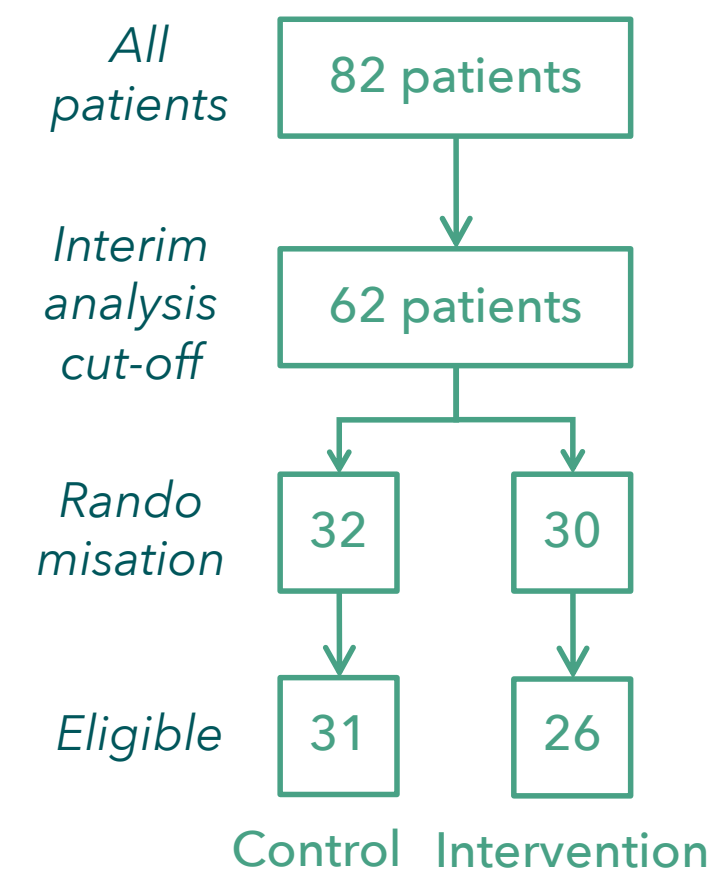


Table 1. Patient characteristics

	Control N	%	Intervention N	%
Patients	32		30	
Gender				
Female	20	(62.5)	21	(72.4)
Male	12	(37.5)	8	(27.6)
missing	0		1	
Administration				
Intraveno	28	(87.5)	24	(80.0)
Oral	4	(12.5)	6	(20.0)
Age				
Mean	64.6	(13.0)	61.0	(11.1)
Median	65		62	

Phone calls

Figure 3. Number of phone calls

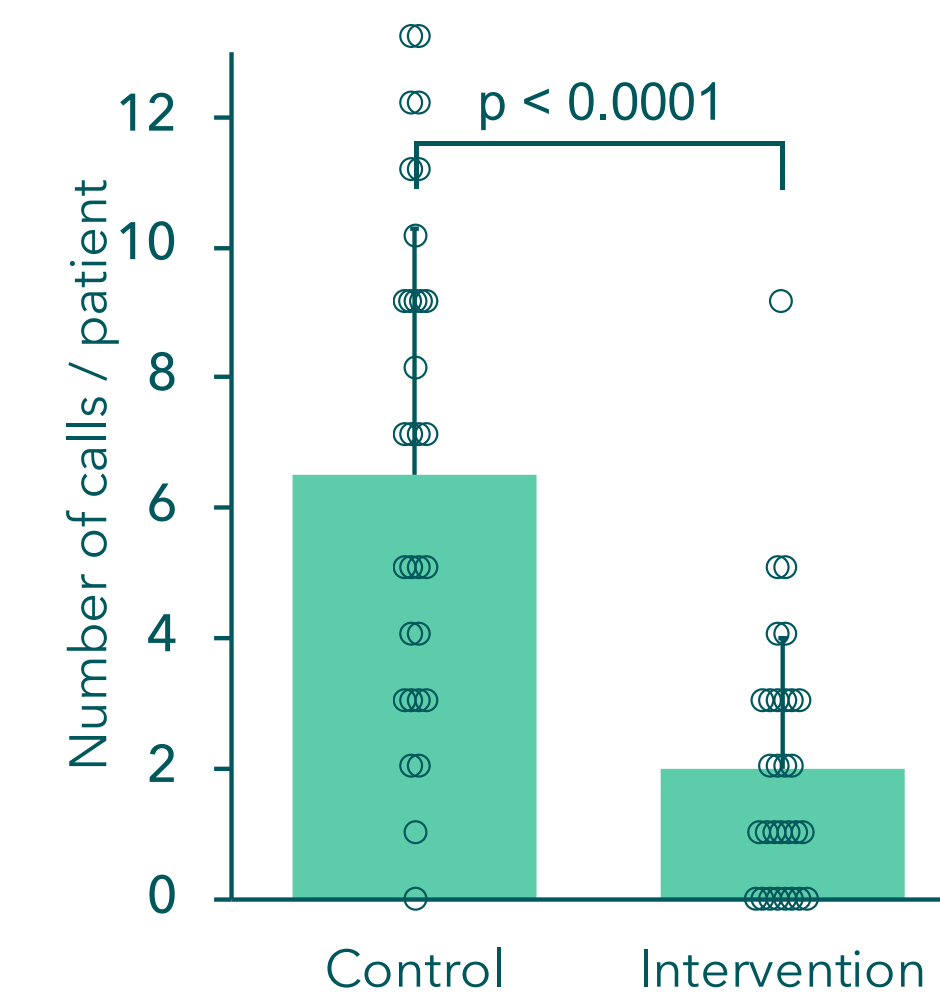
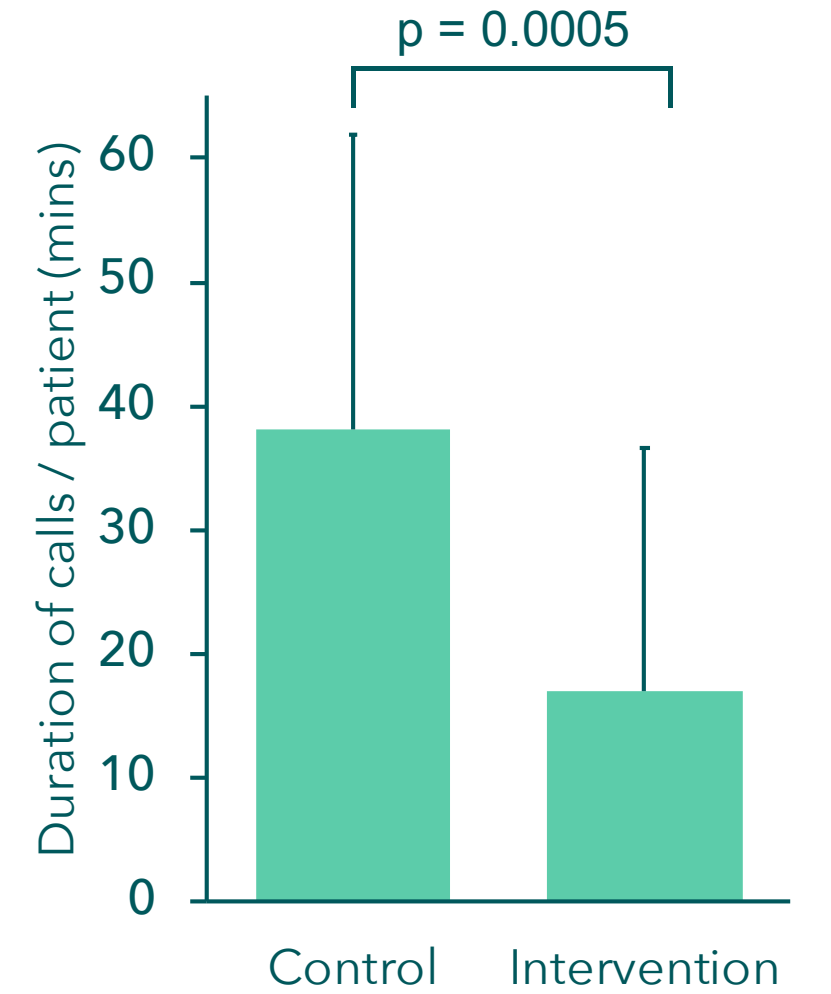


Figure 4. Total duration of phone calls



Conclusions

- Remote patient monitoring results in a significant reduction in
 - the number of phone calls with patients
 - the total duration of these phone calls over 4 months
- The study demonstrates that RPM can benefit the organisation of care and can help allocate more time for patients at risk