

Experience Counts: Unveiling Patients' Willingness to Pay for Remote Monitoring and Patient Self-Measurement

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PREMOM II consortium



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Pregnancy Remote Monitoring for women at risk of gestational hypertensive disorders

Pregnancy Remote Monitoring for women at risk of gestational hypertensive disorders

↳ High blood pressure during pregnancy



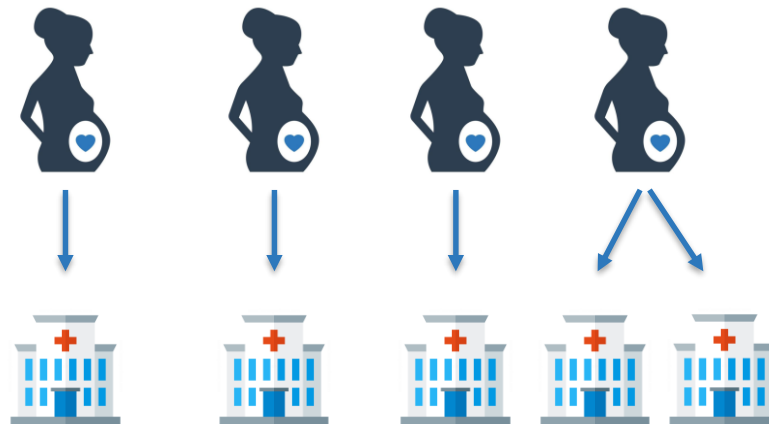
→ More intensive pregnancy follow-up



→ Added value

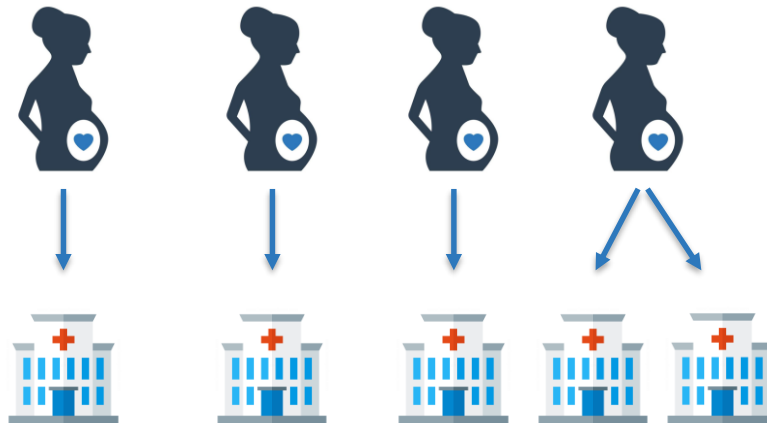
Multi-center, multi-arm randomized controlled trial

→ Multi-center:



Multi-center, multi-arm randomized controlled trial

→ Multi-center:



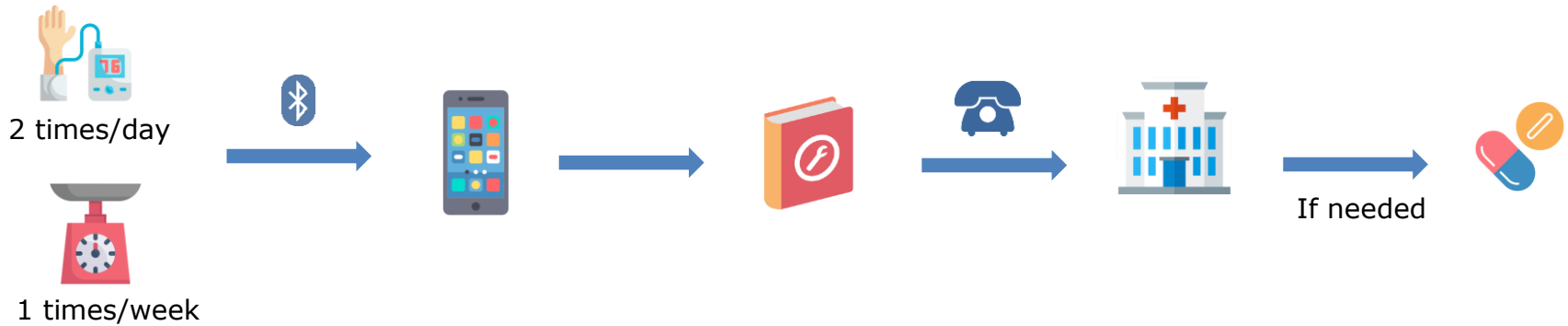
→ Multi-arm:

- Control group
- Patient self-measurement group
- Remote monitoring group

Control group



Patient self-measurement (PSM) group



Remote monitoring (RM) group





RM & PSM: Health-related advantages

BUT



...

→ Contingent valuation (CV)



Problem: Lack of experience



- (1) Estimate patients' WTP for RM and PSM of women at risk of GHD
- (2) Assess the impact of experience with RM and PSM on the WTP for these technologies

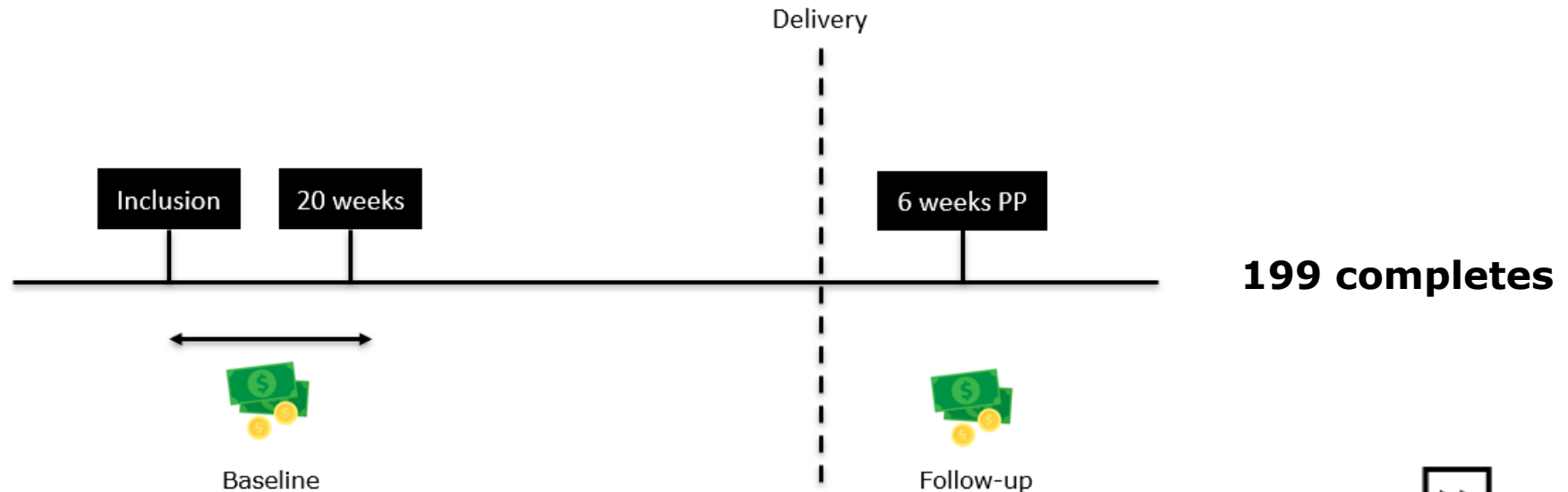
Study design

Payment card + open-ended follow-up

0	5	10	15	20	30	40	50	60	80
100	120	150	200	250	300	400	500	600	> 600

0	10	20	30	40	60	80	100	150	200
250	300	400	500	600	700	900	1100	1300	> 1300

Timing





Estimate patients' WTP for RM and PSM of women at risk of GHD

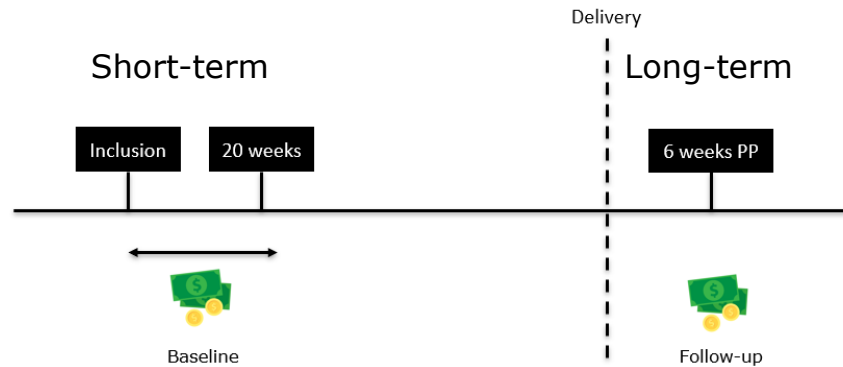
	Baseline	Follow-up
WTP RM		
Whole sample	117.99	122.19
RM group	111.48	137.68
PSM group	121.92	122.20
Control group	123.09	98.94
WTP PSM		
Whole sample	76.92	83.37
RM group	57.58	78.41
PSM group	91.84	86.03
Control group	88.26	87.65



Assess the impact of experience with RM and PSM on the WTP for these technologies

Different types of experience:

- Short-term vs. Long-term experience



- Exact vs. partial vs. no experience
 - Exact experience: RM group with RM, PSM group with PSM
 - Partial experience: RM group with PSM, PSM group with RM
 - No experience: Control group



Assess the impact of experience with RM and PSM on the WTP for these technologies

Results:

Impact experience on **WTP RM**

		Short-term	Long-term
		↑	↑
		ln(WTP RM + 1)	
		Baseline	Follow-up
		(1)	(2)
Exact experience ←	RM group	0.036 (0.371)	0.718* (0.371)
Partial experience ←	PSM group	0.137 (0.340)	0.681** (0.324)
	Observations	199	199

→ Exact (RM group) or partial (PSM group) experience with RM does not significantly impact the corresponding WTP after a **short-term exposure**, compared to not experiencing any intervention.

→ The effect *is* significant after a **long-term exposure**. Compared to women in the control group, WTP is 105,03% higher in case of **exact experience** and 97,59% higher in case of **partial experience**.



Assess the impact of experience with RM and PSM on the WTP for these technologies

Results:

Impact experience on **WTP PSM**

	Short-term	Long-term
	Baseline	Follow-up
	(3)	(4)
Partial experience ← RM group	-0.624 (0.405)	-0.072 (0.395)
Exact experience ← PSM group	0.195 (0.377)	0.365 (0.344)
Observations	199	199

→ Experience had no impact on the WTP for PSM, neither after a **short-term** nor a **long-term** exposure



Assess the impact of experience with RM and PSM on the WTP for these technologies

Robustness checks:

- Tobit regression
- Sample without protest zeros
- Sample without inconsistent outliers
 - Conditions:
 1. Outlier
 2. Inconsistent
 - Preference for RM but $WTP_{RM} < WTP_{PSM}$
 - Preference for PSM but $WTP_{RM} > WTP_{PSM}$
- Sample without smallest hospital



Robust!

CONCLUSION

1

Flemish pregnant women at risk of GHD had a reasonably high WTP to use RM or PSM during their pregnancy

→ RM: €120, PSM: €80

2

Experience can have a positive impact on WTP

→ Depends on...

- Length of exposure
- Type of technology

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