

# MOTIF: MOBILE Technology for Improved Family Planning

The development of a mobile phone-based service to support post-abortion family planning (PAFP) in Cambodia

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## Background

*The challenge: low uptake of post-abortion family planning (PAFP)*

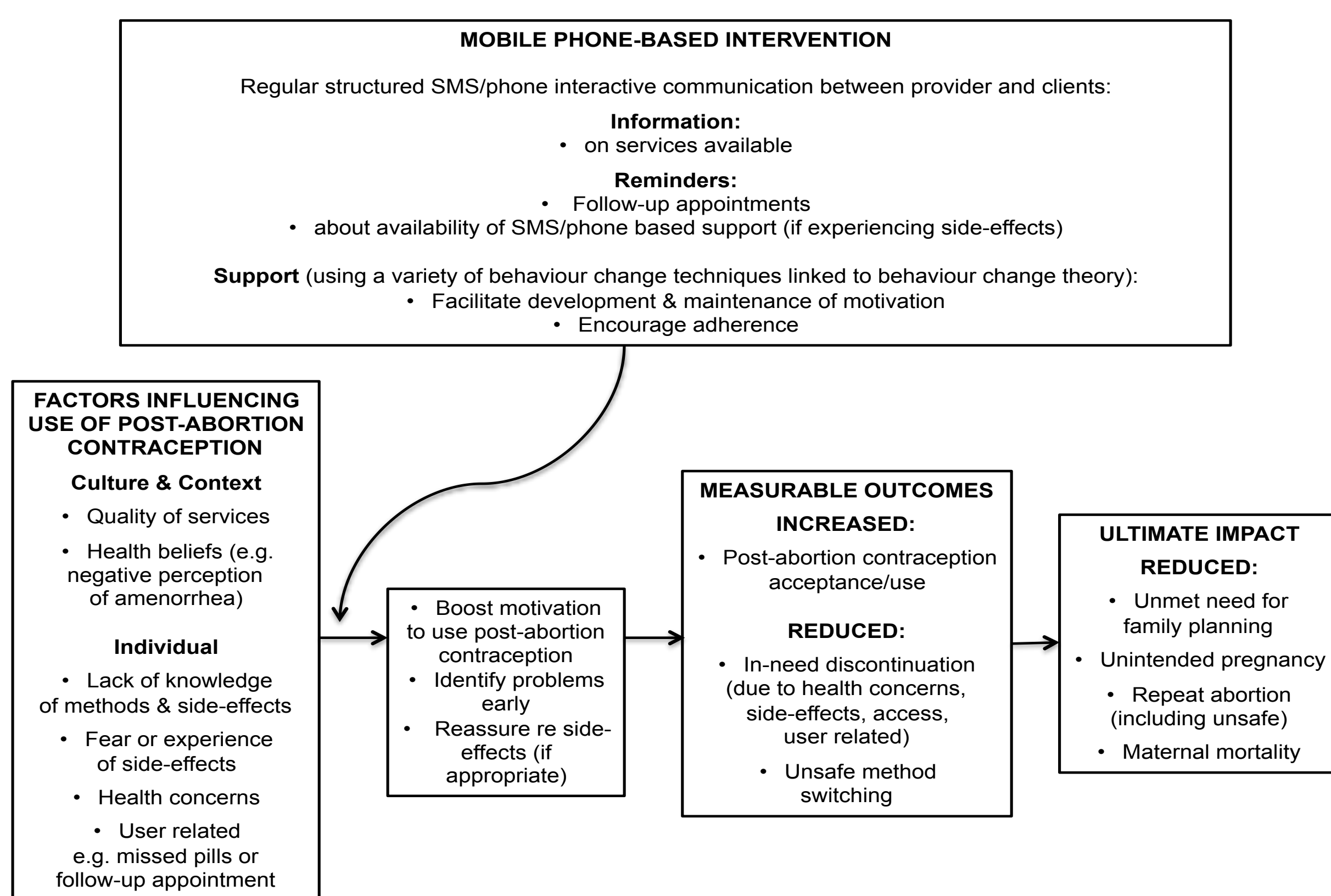
- Abortion rate in Cambodia is estimated to be amongst the highest in South East Asia at 50/1000 women aged 15-44, well above the global average of 28/1000 (1)
- Around 25% of women will have a repeat abortion within five years (2)
- Only 23% of clients at Marie Stopes International Cambodia (MSIC) adopted long-acting methods of PAFP

*The innovation: support for PAFP via mobile phone*

- Mobile communication technology is the fastest-growing sector of the communications industry in low-income countries
- There has been widespread uptake of mobile phones in Cambodia
- Most Marie Stopes clients report that they own a mobile phone
- MSIC commenced the MOTIF project in October 2012 to develop, implement and evaluate a mobile phone-based (mHealth) service to support PAFP

## Intervention development methods

*Development of a conceptual framework*



*Literature review of effective mHealth / contraception interventions*

- 'WellTel' trial in Kenya reported increased adherence to anti-retroviral treatment with an SMS and phone-based intervention: demonstrating that mHealth interventions can be effective both in low-income settings, and among populations where privacy and confidentiality are important (3)
- One effective SMS contraceptive pill trial in USA (4), none in low-income settings

*Formative research to further understand the local context*

- Retrospective case note review of 100 abortion clients to estimate baseline event rates
- Semi-structured interviews with abortion clients
- Observation of current practice
- Focus groups

*Message development: content, tone, and style*

- Collaboration with clients and technology partners at the InSTEDD South East Asia iLab in Phnom Penh and BBC Media Action, using Verboice open-source software (<http://verboice.instedd.org/>)

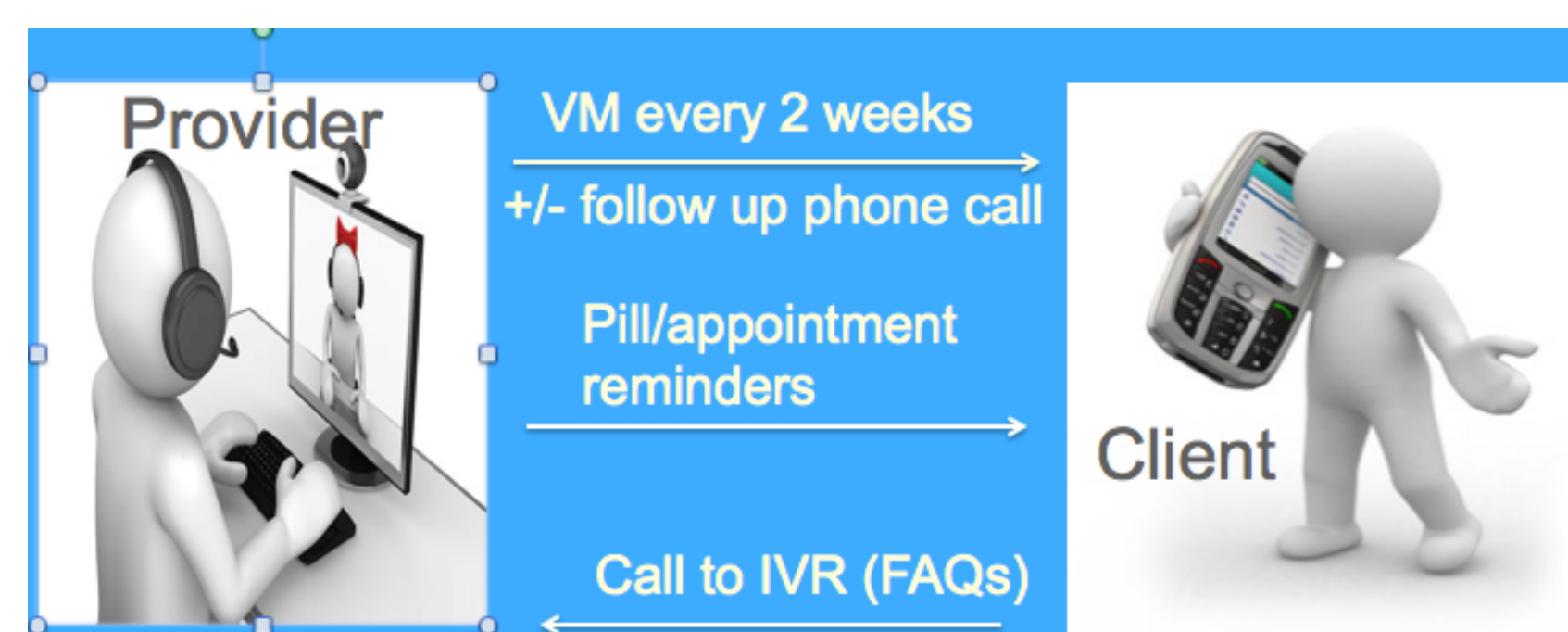


## MOTIF intervention

- Based on the formative research findings & literature review, MOTIF has been developed as a voice message based service
- MOTIF reminds clients of available contraceptive methods, and supports clients experiencing side-effects from their current contraceptive method by identifying PAFP problems early
- The overall aim of MOTIF is to reduce unmet need for contraception, unintended pregnancy, repeat abortion and maternal mortality

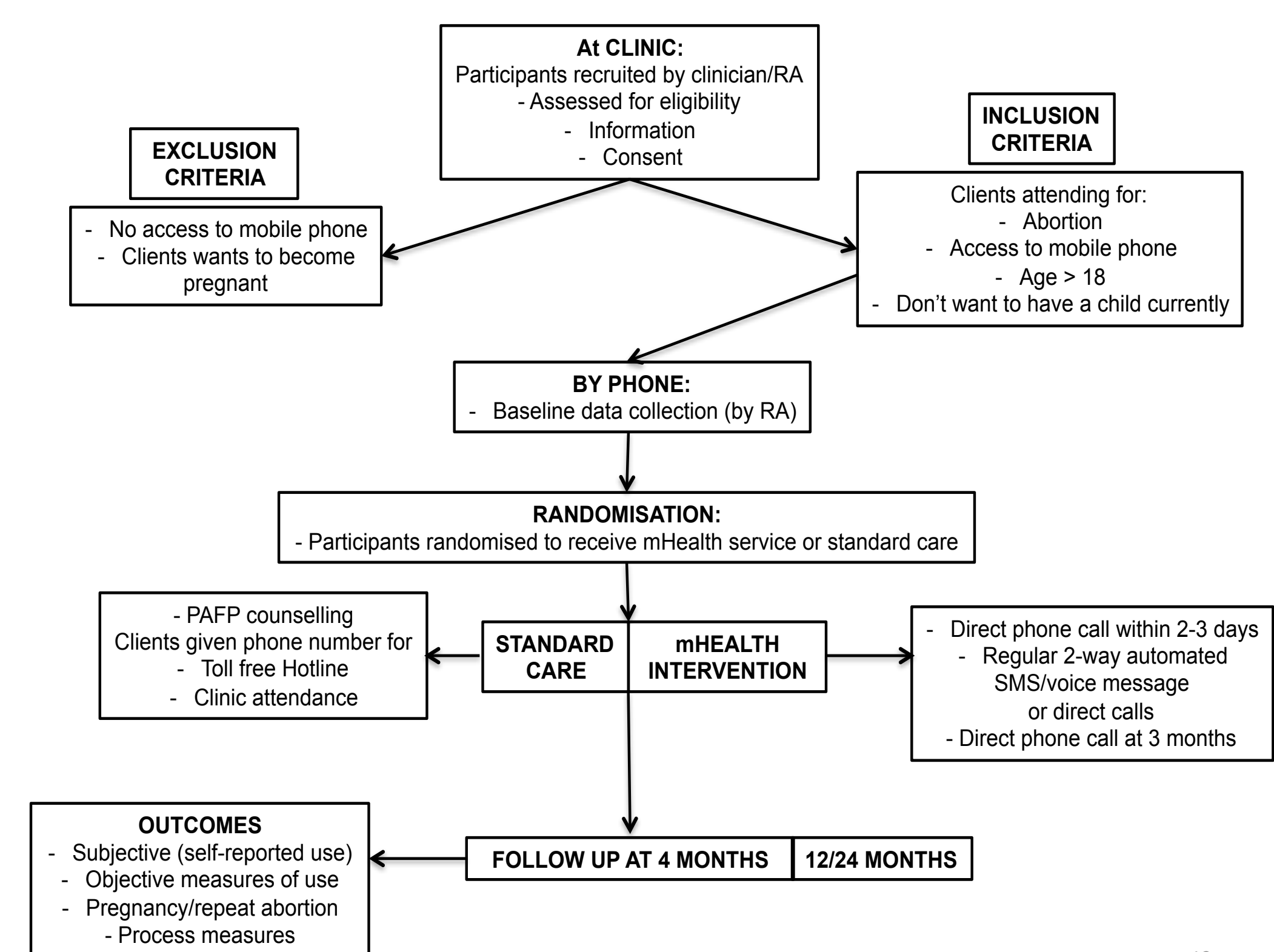
*The MOTIF service*

- Clients are offered the MOTIF service to support PAFP for three months after attending for abortion
- Clients are sent an automated voice message within a week of the abortion and then every two weeks, receiving a total of six messages
- The message is designed to provide information and support, and also requests that the client responds to indicate if they have any problems they would like to discuss with a counselor
- Clients identified as requiring help, or that do not respond to voice messages, are followed-up with a phone call by a MSIC Family Planning Counselor
- Additionally, clients are able to call the MOTIF service to request a call from a counselor



## How will we know if it works?

- Initial piloting has indicated that this approach is effective in providing support to clients, as many clients have questions about contraception; often related to availability of methods or side-effects.
- As part of the current project, the MOTIF service is being evaluated with an individual randomised controlled trial (RCT) of 500 participants from four MSIC clinics to evaluate health outcomes including contraception use at four months, repeat pregnancy and abortion.(5)



## Discussion

- What is the role of GPs regarding PAFP?
- Do you think the intervention will increase PAFP uptake at four months?
- If so, what are the 'active components', the voice message or the phone call?
- If so, will it be cost-effective to scale up the intervention?
- Would such an intervention (voice message or SMS) be effective in the UK or Japan?
- How could the intervention be adapted for smartphones?
- Do you have any ideas or suggestions for using mobile technologies to improve healthcare beyond contraception in primary care?

## References

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