

# Background

Physician engagement in research is generally low. One way to encourage providers to participate more is to reward them with an incentive or a "nudge". Typical financial incentives offer suboptimal solutions. An alternative option available to physicians is to participate in research studies, and to reflect on how that participation might influence practice, in exchange for credits toward annual recertification.

# **Research questions**

RQ1: Can non-financial incentives, such as CME credits, increase physician recruitment?

RQ2: Does highlighting of non-financial incentives in recruitment differentially increase participation rates by physicians?

# Methods

Participants:

- N = 200 family physicians
- Ontario, Canada; including participating physicians in TRANSFORMATION project

Recruitment:

- Email and snowball sampling from Local Health Integration Networks (LHINs)
- In person and conference booths

Manipulations ("nudges"): within recruitment email (Figure 1)

- MAINPRO eligibility in Times New Roman 12-point font (Control), OR
- Times New Roman 14-point font, in bold (Bold).

Analysis:

 Comparison of recruitment rates across conditions; independent samples t-test

# Nudges and incentives with physicians

Nudges are any form of manipulation that reinforces a particular action over it's alternative, without forbidding the alternative outright (Thaler & Sunstein, 2008). Financial incentives can act as nudges. Even small incentives can have a large effect; however, they may "crowd out" intrinsic motivations to participate (Kreps, 1997), making future recruitment more difficult. Further, physicians may be most concerned with the interests of their patients and on practice-related learning (Page et al, 2011; Gunn & Rhodes, 1981), rather than on financial incentives. As such, extrinsic and intrinsic benefits of using incentives with physicians may be complicated by unique trade-offs and interests.

# Figure 1. Recruitment email

to me 🕞

information

**Principal Investigator:** Dr. William Hogg

Co-Investigators: Dr. Ester Moher Dr. Khaled El Emam

(http://www.cfpc.ca/MainproCCredits/).

Thank you,

Université d'Ottawa / University of Ottawa 85, ave. Primrose Ave. Ottawa, Ontario K1R O1A

### References

Cook, Heath & Thompson (2000). A meta analysis of response rates in web or internet-based studies. Gunn & McDermott et al (2003). The effects of continuing medical education credits on physician response rates to a mailed questionnaire. Page et al (2011). Recruitment difficulties in primary care cluster Rhodes (1981). Physician response rates to a telephone study. Johnston et al (2010). Barriers & facilitators to recruitment of physicians & practices for primary care health services research at one centre. Kreps (1997). randomized trial. Thaler & Sunstein (2008). Nudge. VanGeest, Johnson & Welch (2007). Intrinsic motivation and extrinsic incentives. MAINPRO website. <u>http://www.cfpc.ca/MainproWorks/</u>. Methodologies for improving response rates in surveys of physicians.

# MEASURING AND IMPROVING THE PERFORMANCE OF PRIMARY HEALTH CARE IN CANADA

# TRANSFORMATION Physician engagement in research

# The use of MAINPRO credits to increase participation among physicians **MAINPRO credits**



# Figure 2. MAINPRO-eligible activities

# Pre-accredited learn activities:

- Conferences, courses, and workshops
- Advanced life support programs
- Small group learning
- Traineeships and fellowships (organized)

## Self-directed learning activities:

- Family, emergency medicine exams
- Linking Learning to Practice\*
- Pearls<sup>TM</sup> (reflective exercise)
- Practice audits, quality assurance
- Provincial practice review
- Traineeships and fellowships (selfplanned)
- Degree and diploma studies

\*used by participants in this study

Non-financial incentives are generally not as successful in recruitment (VanGeest et al, 2007), except in the case of continuing medical education (CME) credits (McDermott et al, 2003; Johnston et al, 2010). This strategy may be especially effective because incentive and survey are both designed to help providers improve care. MAINPRO, or MAINtenance of PROficiency credits, are required to maintain membership and designation with the College of Family Physicians of Canada. Family physicians must complete <u>250 credits every 5 years</u> (see Figure 2), half of which may be from programs that provide the opportunity to reflect on, and improve, care. Physicians are able to participate in a research study, and submit a report (see Figure 3) in exchange for two credits. This accreditation is equivalent to 4 hours (one half-day) in a more traditional course.

	•	
n	IN	g

tep 1: Formulate y	our practice question(s).
hat was your specific	question and/or learning on which you based this exercise?
tep 2: Describe th	e information you reviewed.
scribe the activity wh	nich stimulated this exercise (including where and when) and the kind of information
tained from it.	
ep 3: Consider th	e information.
-	ment of the quality of the information you reviewed? Describe its validity (i.e. Is it cientific evidence?) and relevance (i.e. Is it applicable to your patients in your
ased on appropriate s	ment of the quality of the information you reviewed? Describe its validity (i.e. Is it cientific evidence?) and relevance (i.e. Is it applicable to your patients in your
ased on appropriate s	
-	
sed on appropriate s	
sed on appropriate s	
ased on appropriate so ommunity?).	cientific evidence?) and relevance (i.e. Is it applicable to your patients in your
ased on appropriate so ommunity?).	
ased on appropriate so ommunity?).	cientific evidence?) and relevance (i.e. Is it applicable to your patients in your
ased on appropriate so ommunity?).	cientific evidence?) and relevance (i.e. Is it applicable to your patients in your
ised on appropriate so mmunity?).	cientific evidence?) and relevance (i.e. Is it applicable to your patients in your
sed on appropriate so mmunity?).	cientific evidence?) and relevance (i.e. Is it applicable to your patients in your
Ased on appropriate so mmunity?).	cientific evidence?) and relevance (i.e. Is it applicable to your patients in your
hat approach or t	cientific evidence?) and relevance (i.e. Is it applicable to your patients in your ools did you use to come to this conclusion? Comparison about your practice.
sed on appropriate so mmunity?).	cientific evidence?) and relevance (i.e. Is it applicable to your patients in your
A sed on appropriate so mmunity?).	cientific evidence?) and relevance (i.e. Is it applicable to your patients in your ools did you use to come to this conclusion? Comparison about your practice.
Ased on appropriate sommunity?).	cientific evidence?) and relevance (i.e. Is it applicable to your patients in your ools did you use to come to this conclusion? Comparison about your practice.



# **Anticipated results**

MAINPRO eligibility should encourage participation

Especially robust when notice is bold

The majority of respondents should elect to apply for MAINPRO credits for participation

- Especially robust when notice is bold
- Facilitates knowledge translation of our work: more reflection  $\rightarrow$  more employment in practice

# Conclusions

Given the preliminary stages of this work, no conclusions have been derived. Incorporating CME with research could act superadditively, maximizing recruitment and knowledge translation of findings.

### Conflict of interest:

Khaled El Emam is the CEO of Privacy Analytics, a software company. Affiliation with Privacy Analytics Inc. does not influence our objective presentation of the research conducted in this submission.

# Acknowledgements

This work is funded by:



iscover. Connect. Engage

INSTITUT DE RECHERCHE BRUYÈRE **RESEARCH INSTITUTE** 





a place of mind