

**2022 UK-Japan Exchange Seminar**  
**'Applying Behavioural Science in Japan and the UK: Supporting  
Public Health Outcomes'**

# **Increasing the Uptake of Health Screening Using Nudge Theory**

**9th November, 2022 (Wednesday)**

**Yokohama Behavioral insights and Design Team (YBiT)**

**Director Yuta Takahashi**

# Yokohama City

Population: 3.77 million  
(August, 2022)



# Yokohama City Behavioural Insights and Design Team (YBiT)

**Japan's first nudge unit** founded by local authorities in February 2019.

Team made up of about 20 voluntary staff of Yokohama City Government and advisors include academics.

Conduct training, support for case studies, and support for local authorities.



# Yokohama City's health screening programme specified by the National Health Insurance system

- For people between 40 and 75 years old
- Health screening focused on visceral fat obesity
- Medical Examination facilities: about 1,200 medical institutions
- Cost of Medical Examinations : Free
- Health screening available for 1 year from April to March the following year.
- **In May all eligible people are sent an invitation to a health screening**
- **For people who have not yet had a health screening, reminder sent in October.**

# Reminder and Encouragement

Reminder messages are sent by text or postcard.

※The Health Screening Reminder Service is outsourced and implemented by the company 'Cancer Scan'

## Postcard



## Text message

【横浜市からお知らせ】確認したところ特定健診が【未受診】でした。お早めに受診してください。  
(無料)

特定健診の概要・新型コロナウイルス感染症関連情報→

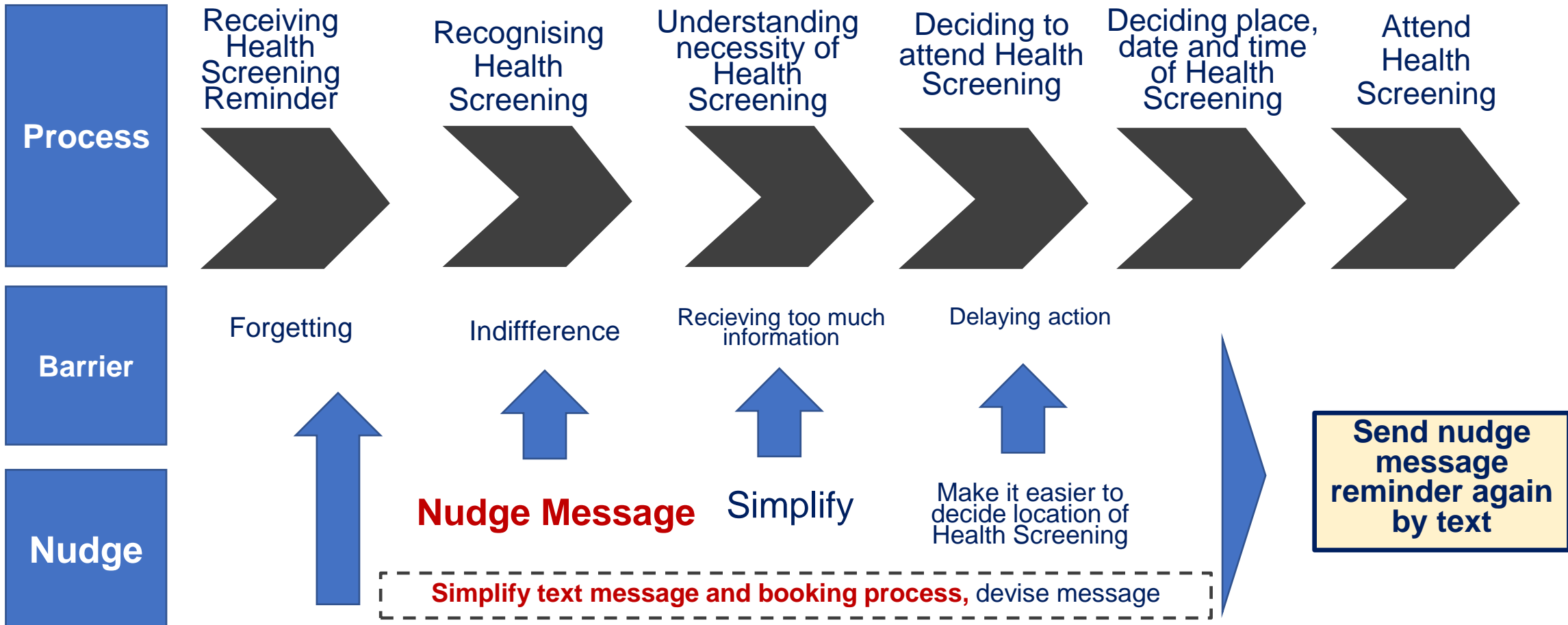
<https://www.city.yokohama.lg.jp/kurashi/koseki-zei-hoken/kokuho/kenko/kensin.html>

※国民健康保険加入の未受診者がいる世帯に送付しています  
※受診済みの方等はお容赦ください

市けんしん専用ダイヤル  
(tel:0456642606)

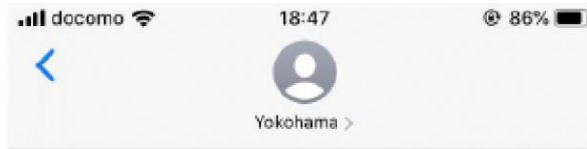
without the perm

# Behavioural Processes and Barriers to Attending Health Screening

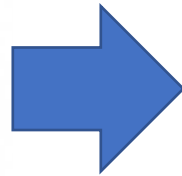


# From Text Message Notification to Health Screening Appointment

## Send notification by text



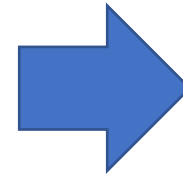
【横浜市からお知らせ】横浜市国民健康保険では、特定健診を無料で受診できます。3月末までに受診をお願いします  
 受診方法等はこちら→  
<https://www.city.yokohama.lg.jp/kurashi/koseki-zei-hoken/kokuho/kenko/>  
 ※国民健康保険加入の未受診者がいる世帯が送付対象  
 ※受診済みの方等はご容赦ください  
 ※市けんしん専用ダイヤル (045-664-2606)



## Link directs to City's website

健康づくり、特定健康診査・特定保健指導

- 特定健診・特定保健指導の制度について
- 特定健康診査のご案内
- 特定保健指導のご案内
- 特定健康診査実施機関
- 特定保健指導実施機関
- 特定健診・特定保健指導事業者向け情報
- 保健事業実施計画（データヘルス計画）、特定健診等実施計画
- ゼルフメディケーション税制（医療費控除の特例）
- 特定健診・特定保健指導に関する統計データ
- 横浜市民健康だより
- SMS（ショートメッセージサービス）及びハガキによる特定健診のお知らせ



## Select Health Screening Institution from table

横浜市国民健康保険特定健康診査実施機関別一覧表

No.	特定健診実施機関名	詳細な検査項目 ※1		電話	FAX	所在地(町別)	土日実施 ※3
		貧血	心電図				
1	(医)慶通会 慶通病院 <a href="http://www.keiun.com/">http://www.keiun.com/</a>	○	○	501-5361	501-5361	市場西中町2-2	午前
2	(医)畑医院	○	○	501-2019	-	市場西中町6-23	午前
3	村上医院	○	○	501-7727	521-7787	市場東中町10-25	
4	つもとクリニック <a href="http://www.yoko-ho.or.jp/">http://www.yoko-ho.or.jp/</a>	○	○	834-8660	502-4114	市場東中町 8-21-2	
5	(医)崇英会 富士寛クリニック	○	○	511-0243	506-6799	市場富士見町8-8	午前
6	(医)芝山内科	○	○	501-4379	501-4381	市場大和町4-28	午前
7	達辺医院	○	○	501-6457	501-6979	瀬田町3-133-2	午前
8	森山病院	○	○	501-1479	501-4635	瀬田町3-145-4	
9	佐藤医院 <a href="http://www.tadaaki-s.jp/">http://www.tadaaki-s.jp/</a>	○	○	571-4893	571-8209	江ヶ崎町12-19	午前
10	(公財)横浜勤労福祉協会 磯山診療所 <a href="http://xaiyama-clinic.la.cocacn.jp/">http://xaiyama-clinic.la.cocacn.jp/</a>	○	○	582-0123	583-0404	上末町5-22-16	午前

# Aim of Trial

- Verify in an RCT (Randomised Control Trial) whether nudge messages are effective in encouraging people to attend Health Screenings.

# Summary of Trial

Target : 40 to 59 year-olds who have not attended health screening and have a mobile phone number.

Period : Reminders sent in October 2019, then checked whether the health screening was attended between October and March 2020

Method : RCT

Contents of Message	Sending Method		Number of people (Randomly assigned)
	October	November	
Standard	Postcard	Text	2,426
Social norms	Postcard	Text	2,426
Incentive	Postcard	Text	2,425
Timely	Postcard	Text	2,426



# Message ( 4 Patterns)

## Standard (Target Group)

【横浜市からお知らせ】横浜市国民健康保険では、特定健診を無料で受診できます。3月末までに受診をお願いします  
受診方法等はこちら→

[https://  
www.city.yokohama.lg.jp/  
kurashi/koseki-zei-hoken/  
kokuho/kenko/](https://www.city.yokohama.lg.jp/kurashi/koseki-zei-hoken/kokuho/kenko/)

\*国民健康保険加入の未受診者がいる世帯が送付対象

\*受診済みの方等はお容赦ください

\*市けんしん専用ダイヤル  
(045-664-2606)

### General Message

(Notice from Yokohama City) Those who are registered for National Health Insurance with Yokohama City can receive a Health Screening for free. Please attend your health screening before the end of March. How to attend your health screening e t c : <https://www.city.yokohama.lg.jp/kurashi/koseki-zei-hoken/kokuho/kenko/>

\* Sent to households where someone has not yet attended a Health Screening.

\* Please ignore if you have already attended a Health Screening

\* City Health Screening Number (045-664-2606)

## Social norms

【横浜市からお知らせ】未受診者に特定健診を受けてもらうよう、国の指導を受けています。3月末までに受診をお願いします(無料)  
受診方法等はこちら→

[https://  
www.city.yokohama.lg.jp/  
kurashi/koseki-zei-hoken/  
kokuho/kenko/](https://www.city.yokohama.lg.jp/kurashi/koseki-zei-hoken/kokuho/kenko/)

\*国民健康保険加入の未受診者がいる世帯が送付対象

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(045-664-2606)

Recognise the necessity of attending a Health Screening.

(Notice from Yokohama City) The National government has instructed those who have yet to do so to attend a health screening. Please attend your health screening before the end of March (free). How to attend your health screening e t c : <https://www.city.yokohama.lg.jp/kurashi/koseki-zei-hoken/kokuho/kenko/>

\* Sent to households where someone has not yet attended a Health Screening.

\* Please ignore if you have already attended a Health Screening

\* City Health Screening Number (045-664-2606)

# Message ( 4 Patterns)

## Incentive

【横浜市からお知らせ】1万円相当の特定健診が無料で受診できます。3月末までに受診をお願いします

受診方法等はこちら→

<https://>

[www.city.yokohama.lg.jp/kurashi/koseki-zei-hoken/kokuho/kenko/](https://www.city.yokohama.lg.jp/kurashi/koseki-zei-hoken/kokuho/kenko/)

\*国民健康保険加入の未受診者がいる世帯が送付対象

\*受診済みの方等にご容赦ください

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(045-664-2606)

By referring to the 10,000 yen, it seems like a bargain.

(Notice from Yokohama City) You can receive a Health Screening worth 10,000 yen for free. Please attend your health screening before the end of March. How to attend your health screening etc: <https://www.city.yokohama.lg.jp/kurashi/koseki-zei-hoken/kokuho/kenko/>

\* Sent to households where someone has not yet attended a Health Screening.

\* Please ignore if you have already attended a Health Screening

\* City Health Screening Number (045-664-2606)

## Timely

【横浜市からお知らせ】確認したところ、特定健診が【未受診】でした。3月末までに受診をお願いします(無料)

受診方法等はこちら→

<https://>

[www.city.yokohama.lg.jp/kurashi/koseki-zei-hoken/kokuho/kenko/](https://www.city.yokohama.lg.jp/kurashi/koseki-zei-hoken/kokuho/kenko/)

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(045-664-2606)

Recognising that they have not yet attended a Health Screening.

(Notice from Yokohama City) According to our records, you have not yet attended a Health Screening. Please attend your health screening before the end of March (free). How to attend your health screening etc: <https://www.city.yokohama.lg.jp/kurashi/koseki-zei-hoken/kokuho/kenko/>

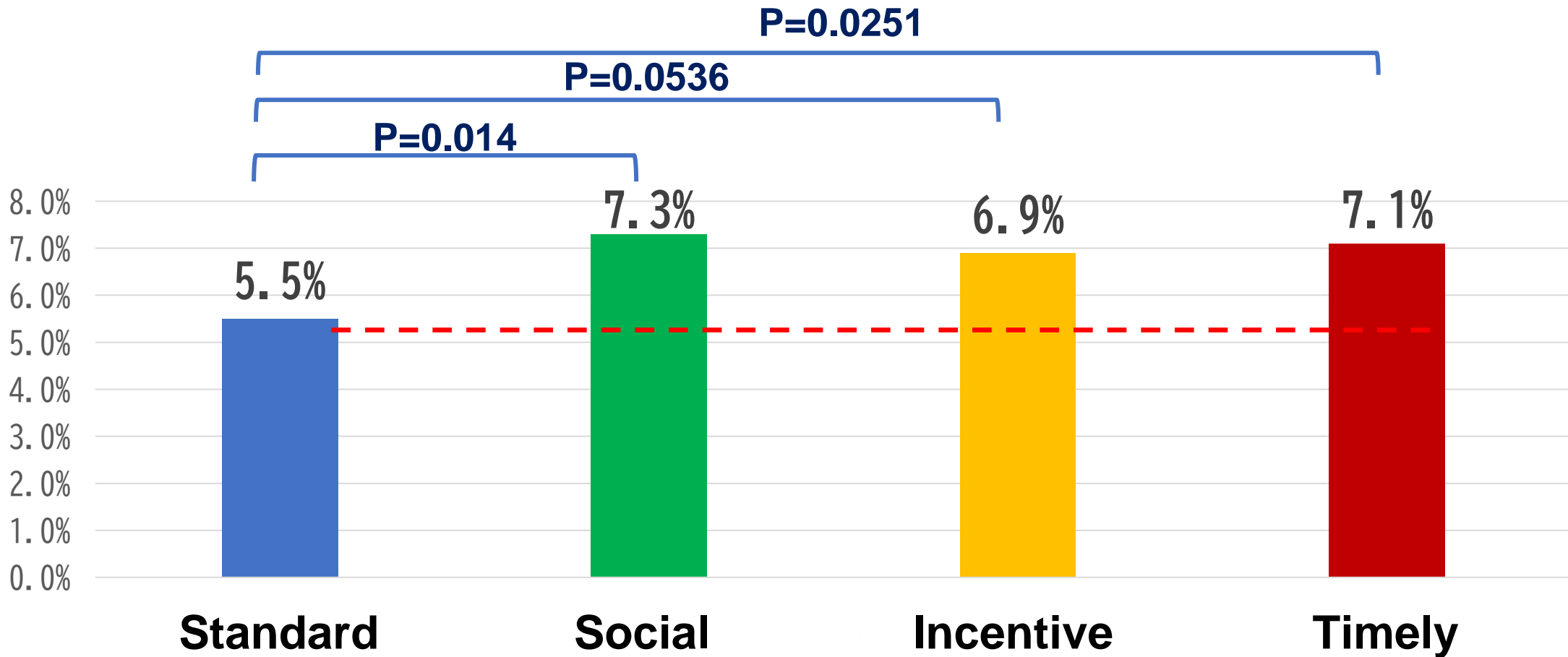
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# Effectiveness according to type of message

Messages that use Nudge Theory are very effective



# Conclusions and Limitations

- Nudge messages increase the rate of attendance to Health Screenings compared to standard messages
  - ⇒ Suggests the possible effectiveness of Nudge Messages
- Text messages can't be used if there is no record of the mobile phone number
  - ⇒ During the application procedure, could request mobile phone numbers
- Are Health Screenings effective in the first place?
  - ⇒ Depends on the goal, there is some dispute