# Use of the Precaution Adoption Process Model in screening among older persons

D.J.A. van Dijk-van Dijk<sup>1,2,5</sup>, P. van Empelen<sup>3</sup>, M.R. Crone<sup>1,5</sup>, M.J. Bakker<sup>4,5</sup>, W.J.J. Assendelft<sup>1,5</sup>, B.J.C. Middelkoop<sup>1,4,5</sup> 1 Leiden University Medical Center, Department of Public Health and Primary Care 2 Public Health Service, HM 3 Erasmus Medical Centre, Rotterdam 4 Public Health Service, The Hague 5 Academic Collaborative Centre Public Health NZH

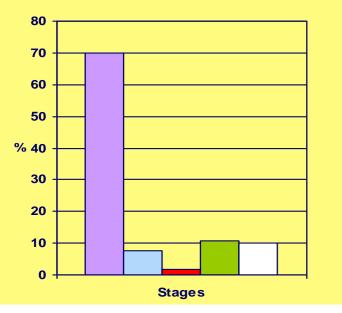
## Background

In the Netherlands preventive health centres for older persons is pleaded for as a solution to the growing health care costs. We examined what determines which people, eligible for screening, actually go for screening; using a stage model of health behaviour (the Precaution Adoption Process Model).

## Method

Cross-sectional survey data of 2390 people, 55 years and older, living in areas where preventive health centres exist, is analysed with regard to lifestyle, personal and external factors.

# Figure 1 Stage distribution screening uptake among older persons in the Netherlands



□ Stage 1: unaware of screening possibility

□ Stage 2/3: undecided about screening

- Stage 4: decided against screening
- Stage 5: decided in favour of screening
- □ Stage 6/7: taken screening

### **Results**

- Most people eligible for preventive screening are unaware of the possibility (*figure 1*).
- → People are generally positive about screening (*figure 2*).
- → (Perceived) social norms and selfefficacy play a significant role in the decision-making process of screening uptake.
- Undecided people and people deciding against screening are less personally involved and have more doubts concerning the usefulness and necessity of screening than others (figure 2).
- Compared to people deciding in favour (but who did not take tests), people that have taken tests are on average older and more often receive a personal invitation.

### PAPM

The Precaution Adoption Process Model is a stage model of health behaviour. In this study, we distinguish among 7 stages whereby people in stage 2/3 and 6/7 are very alike and therefore treated as one stage.

Figure 2 Differences in attitudinal beliefs between stages

	Stage					Scheffe
	1	2/3	4	5	6/7	post hoc analysis
% agreement	%	%	%	%	%	*
Negative beliefs						
Personally, screening is not needed	12	21	23	6	8	5,6/7,1 < 2/3,4
Need test only if have symptoms	22	42	47	10	16	5,6/7,1 < 2/3,4
Having screening test is just looking for trouble	33	44	59	29	28	6/7 < 2/3,4 5,1 < 4
Information about previous health status is essential	43	56	69	28	35	5,6/7 < 2/3,4 1 < 4
Visiting your GP regularly makes screening unnecessary	36	55	60	30	37	5 < 4,2/3
Positive beliefs						
Screening is the best you can do	63	48	34	73	76	4 < others 2/3 < 5, 6/7
Screening is needed for people my age	79	66	40	95	91	4 < others 2/3,1 < 5,6/7
Early screening leads to timely identification of health problems	91	83	60	96	91	4 < others 2/3 < 5
People with a family history need screening	94	92	91	97	95	4 < 1,6/7,5 2/3 < 5
Early screening benefits treatment	95	90	83	99	98	4 < 2/3, 5,6/7
* Additional exploration of means % agr	oomont in	left stan	es is sian	ificant lov	vor than ir	n right stages

### **Conclusions**

- Preventive health centres should be aimed at:
- Providing balanced and realistic information, targeting advantages and disadvantages of screening
  Lowering potential barriers by sending personal invitations and visiting people at home, if necessary.
- Sending invitations for screening simultaneously to people living in the same neighbourhood by the people's own GP.
- Providing help to find ways in changing unhealthy lifestyles.

Contact : PRIMUS@LUMC.NL

 $\mathbf{a}\mathbf{w}$ 

\* Additional exploration of means. % agreement in left stages is significant lower than in right stages ( $\alpha = .05$ )

