



# ODHIN

**Optimizing delivery  
of health care interventions**



# Methods of the ODHIN cluster randomized factorial trial

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## Hypotheses tested:

1. The provision of each of **training and support**, **financial** reimbursement, and referral to an **internet** based method of delivering advice (e-BI) **will increase intervention rates** compared to non-provision;
2. The **combination of** training and support, financial reimbursement, and e-BI in pairs or altogether will be more effective in increasing intervention rates **compared to single-focused** implementation strategies (training and support, financial reimbursement, and e-BI each alone).

## Hypotheses tested:

3. The **provider mix** in the PHCU (doctor, nurse, practice assistant), operationalized by the proportion of providers within a PHCU that were doctors, **will moderate the impact** of training and support, financial reimbursement, and e-BI on intervention rates.

## Participants:

- 120 Primary health care units (PHCU) with approximately 5,000-20,000 registered patients
- Providers: any fully trained medical practitioner, nurse or PHCU assistant with a permanent appointment

# Implementation strategies

## 1. Training and support

- Training session 1 (1-2 hours)
- Support session (10-30 min)
- Training session 2 (1-2 hours)
- Optional: training session 3 (1-2 hours)

Training addressed knowledge, skills, personal attitudes, combining theory and practical exercises

# Implementation strategies

## 2. Financial reimbursement

- Payment for SBI activities
- Rates based on country specifics
- Range:
  - €1.25 - €9 for screening (Catalonia max €250 per provider (lump sum))
  - €10 - €25 for BI

## Implementation strategies

### 3. e-BI

- Refer at-risk patients to an online SBI programme.
- Using a referral leaflet with unique log-in codes



# Factorial design

Allocation	Training & Support	Financial reimbursement	BI via internet (e-BI)
1	-	-	-
2	+	-	-
3	-	+	-
4	-	-	+
5	+	+	-
6	+	-	+
7	-	+	+
8	+	+	+

## Outcomes

### - **Intervention rate (primary outcome)**

$$\frac{\text{N AUDIT-C positive patients that received a BI}}{\text{N consultations}}$$

NB: BI = oral advice, an advice leaflet, referral to the e-BI programme, or referral for advice to another provider in or outside the PHCU

### - **Screening rate (secondary outcome)**

$$\frac{\text{N patients screened}}{\text{N consultations}}$$

## Outcomes

- **AUDIT-C positive rate** (secondary outcome)

$$\frac{\text{N AUDIT-C positive patients}}{\text{N patients screened}}$$

- **Advice rate** (secondary outcome)

$$\frac{\text{N patients received BI}}{\text{N AUDIT-C positives}}$$

## Measurements

T0. 4 week baseline



(4 weeks)

T1. 12 weeks implementation



(6 months)

T2. 4 week follow-up

## Analyses: factorial design coding

- Coding each factor (T&S; FR; e-BI) as (-1,1)
- Why?
  - Effect of T&S instead of no T&S can not only be estimated from T&S vs control, but also from T&S+FR vs FR, T&S+eBI vs eBI
- Multilevel analysis (PHCU nested within country)

# Thank you



*"THE WIFE AND I HAVE DECIDED TO NOMINATE OUR WEEKLY DRINK-FREE DAYS AS TOMORROW AND THE DAY AFTER TOMORROW."*