Managing health literacy for weight loss in primary health care: Better Management of Weight in General Practice (BMWGP)
Outline

1. Background and aims

2. Methods

3. Findings

4. Implications
Rationale

• Over 80% of the population visit a GP at least once a year (ABS 2013)

• Two thirds of patients presenting in general practice are overweight or obese (BEACH 2015)

• Behaviour interventions can be effective in helping patients to lose weight in PHC (LeBlanc 2011)
5As of preventive care

- **Ask**: Risk, Health Literacy, Readiness
- **Assess**: Motivational interviewing, goal setting
- **Advise & Agree**: Individual plan, referral navigation
- **Assist**: Follow up and maintenance
Barriers to effective preventive care

- Patient
- Family
- Community
- GP or PN
- Practice
- Health system

Lifestyle change
Health literacy in Australia

Very low health literacy affects 20% of Australian adults and is a barrier to the uptake and effectiveness of lifestyle interventions. (ABS 2006)
Percent of general practice patients with low health literacy by BMI

Aim: To determine the effectiveness of lifestyle interventions aimed at improving adults’ knowledge and skills for weight loss in primary health care.

Evidence found for the effectiveness of interventions that focussed on improving knowledge and skills (health literacy) for weight loss.

However, there was insufficient evidence to determine relative effectiveness of individual intervention methods.
Pilot study

• Aim: to determine the feasibility of an intervention to enhance preventive care for people with low health literacy in primary health care.

• A mixed method study in four Sydney general practices in areas of socioeconomic disadvantage.

• Despite improved awareness of the need for better communication, there was limited evidence of change in providers’ approach to providing preventive care, suggesting a need for more attention towards providers’ attitudes to support these patients.

* Aust J of Primary Health, 2014; [http://dx.doi.org/10.1071/PY14061](http://dx.doi.org/10.1071/PY14061) *
BMWGP Trial
Aims

To evaluate

• the implementation and effectiveness of primary care nurses acting as prevention navigators to support obese patients with low health literacy to lose weight.

  – the reported assessment and management of patients with obesity and low health literacy (GP and practice nurse [PN] surveys and interviews)

  – the assessment of risk factor recording by GPs (clinical audit)

  – the reported assessment of lifestyle-related risk factors and management by GPs and PN (patient interviews)
Health professional involvement

- 61 participants: 37 GPs and 24 PNs from 20 practices in disadvantaged areas in Sydney and Adelaide.
Intervention

• **Practice level**: Clinical audit with feedback, practice meetings, training of GPs and PNs, practice visits and support phone calls.

• **Clinical level**: Based on the ‘5As’ of the chronic disease model approach – *Assess, Advise, Agree, Assist and Arrange*:
  - Screening for obesity and low health literacy
  - PN health check:
    - Assessment, brief advice and goal setting
    - Referral navigation to one of three options (phone coaching, group education or individual education)
  - ‘Phone follow up.'
Evaluation

• Design: Randomisation of practices (control practices provide usual care)

• Data collection:
  – GP and PN surveys and qualitative interviews
  – Clinical audit
  – Patient interviews (quantitative and qualitative)
Baseline Clinical Audit
Recording of risk factors (n=22,070)

- Smoking: 77%
- Alcohol: 6%
- BMI: 30%
- Waist circ: 5%
- Blood Pressure: 68%
- Lipid: 29%
- CV Risk: 46%
BMI category (n=6,664)

- < 25: 21%
- 25-29.9: 37%
- 30-34.9: 25%
- 35-39.9: 11%
- ≥40: 6%
Risk factors of obese and non-obese patients

**BP (mean)**
- **Systolic BP**
  - Obese: 140
  - Non-obese: 120
- **Diastolic BP**
  - Obese: 80
  - Non-obese: 60

**CV Risk (%)**
- <10%
  - Obese: 80
  - Non-obese: 40
- 10-15%
  - Obese: 30
  - Non-obese: 20
- >15%
  - Obese: 10
  - Non-obese: 5

**Legend**
- **Blue** denotes Obese patients
- **Red** denotes Non-obese patients
Baseline Provider Survey
Frequency of actions across the 5As

- Assess Diet
- Assess PA
- Measure BMI
- Measure WC
- Advise > Fr and Veg
- Advise < Kjoules
- Advise < fat
- Advise > PA
- Set wt loss goal
- Refer diet
- Refer wt management
- Refer PA

%
Confidence in assessment and management of obesity

Assess diet | Assess PA | Assess readiness to lose wt | Advise on weight | Arrange referral for diet, PA or Wt | Follow up referred pts

% of GP: 80 | 70 | 60 | 70 | 60 | 50
% of PN: 30 | 40 | 30 | 40 | 30 | 40

Chart shows confidence levels of General Practitioners (GP) and Practice Nurses (PN) in various aspects of obesity management.
Tailor approach to patients’ health literacy
>60% of the time

Assess health literacy
Tailor advice to HL
Communication techniques
Teach-back
Encourage questions
Assist access to referral
Follow up referral

Assess
Advise/Agree
Assist/Arrange

GP
PN
Barriers to management of obesity in patients with low health literacy

- Lack of time
- Uncertainty about what to provide
- Communication difficulties
- Cultural differences
- Lack of patient interest
- Patient low health literacy

Graph showing the percentage of barriers faced by GPs (blue) and Patient Navigators (PN) (red).
Brief Health Literacy Screen

A. How often do you have someone help you read health information materials?

B. How often do you have problems learning about your medical condition because of difficulty understanding health information materials?

C. How confident are you filling in medical forms by yourself?

(Chew, 2008)
Health literacy screening of recruited patients

![Bar chart showing health literacy screening results for questions A, B, and C. The x-axis represents questions 1 to 5, and the y-axis represents the percentage of patients with higher or lower health literacy. The chart indicates a higher percentage of patients with lower health literacy across all questions.]
Patient Phone Interviews
Association between HLQ domain scores and lifestyle

<table>
<thead>
<tr>
<th>HLQ DOMAIN</th>
<th>Fruit &amp; Veg. Portions</th>
<th>Physical activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health provider support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Having sufficient information</td>
<td></td>
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<tr>
<td>Actively managing health</td>
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<td></td>
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<tr>
<td>Social support</td>
<td></td>
<td></td>
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<tr>
<td>Critical appraisal</td>
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</tr>
<tr>
<td>Active engagement with health providers</td>
<td></td>
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</tr>
<tr>
<td>Navigating healthcare system</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Ability to find good health information</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Reading and understanding health information</td>
<td>✓</td>
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</tr>
</tbody>
</table>
Percentage of patients reporting assessment, advice, referral and attendance

- Measure Wt: 90%
- Measure waist circum.: 60%
- Lifestyle advice: 40%
- Referral: 30%
- Attendance: 10%
Conclusions (so far)

• Low rates of recording of BMI and waist circumference.
• Many obese patients in PHC have high cardiovascular risk.
• GPs and PNs accept role in obesity management including assessment and education. PNs are less confident and both GPs and PNs infrequently report using techniques to manage low health literacy.
• Lower health literacy in obese patients associated with poorer diet but not physical activity scores.
• Lifestyle advice and referral reported by less than half of patients.
Some Potential Implications

The study is ongoing but our work to date suggests:

1. There are barriers to implementation of weight management across the 5As especially referral.

2. The role of practice nurses in education and referral navigation needs to be developed and evaluated.

3. Clinical approach needs to be better tailored to level of health literacy especially in:
   - education about diet
   - active management of patient own health, and
   - helping patients to navigate the health system.
Publications

• Faruqi N, Lloyd J, Ahmad R, Leong L, Harris MF. Feasibility of an intervention to enhance preventive care for people with low health literacy, in primary health care. *Aust J of Primary Health*, 2014; [http://dx.doi.org/10.1071/PY14061](http://dx.doi.org/10.1071/PY14061)


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