

Supporting healthy pregnancy weight gain

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What is the clinical problem?



50%

Pre-pregnancy BMI ≥ 25 kg/m²

30-60%

Excess GWG

Adverse outcomes mother and baby

Independent predictor childhood obesity

A prospective study of pregnancy weight gain in Australian women

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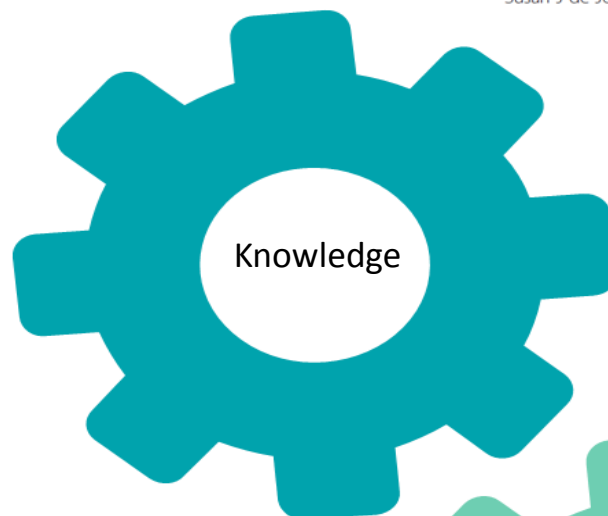
RESEARCH ARTICLE

Open Access

An observational study of nutrition and physical activity behaviours, knowledge, and advice in pregnancy

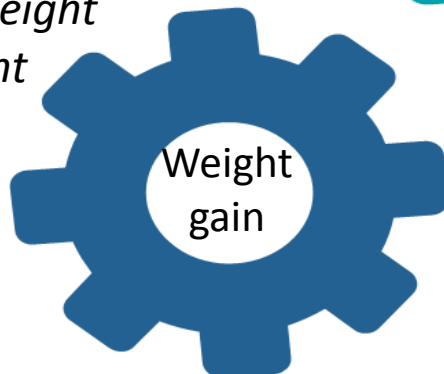
Susan J de Jersey^{1,2*}, Jan M Nicholson^{3,4}, Leonie K Callaway^{5,6} and Lynne A Daniels²

*33% correctly
identified weight
gain*



*65% not
regularly
weighed*

*30% healthy weight
56% overweight
excess GWG*



*Less than 50%
received advice
about healthy
eating, PA, GWG*



What was the evidence?

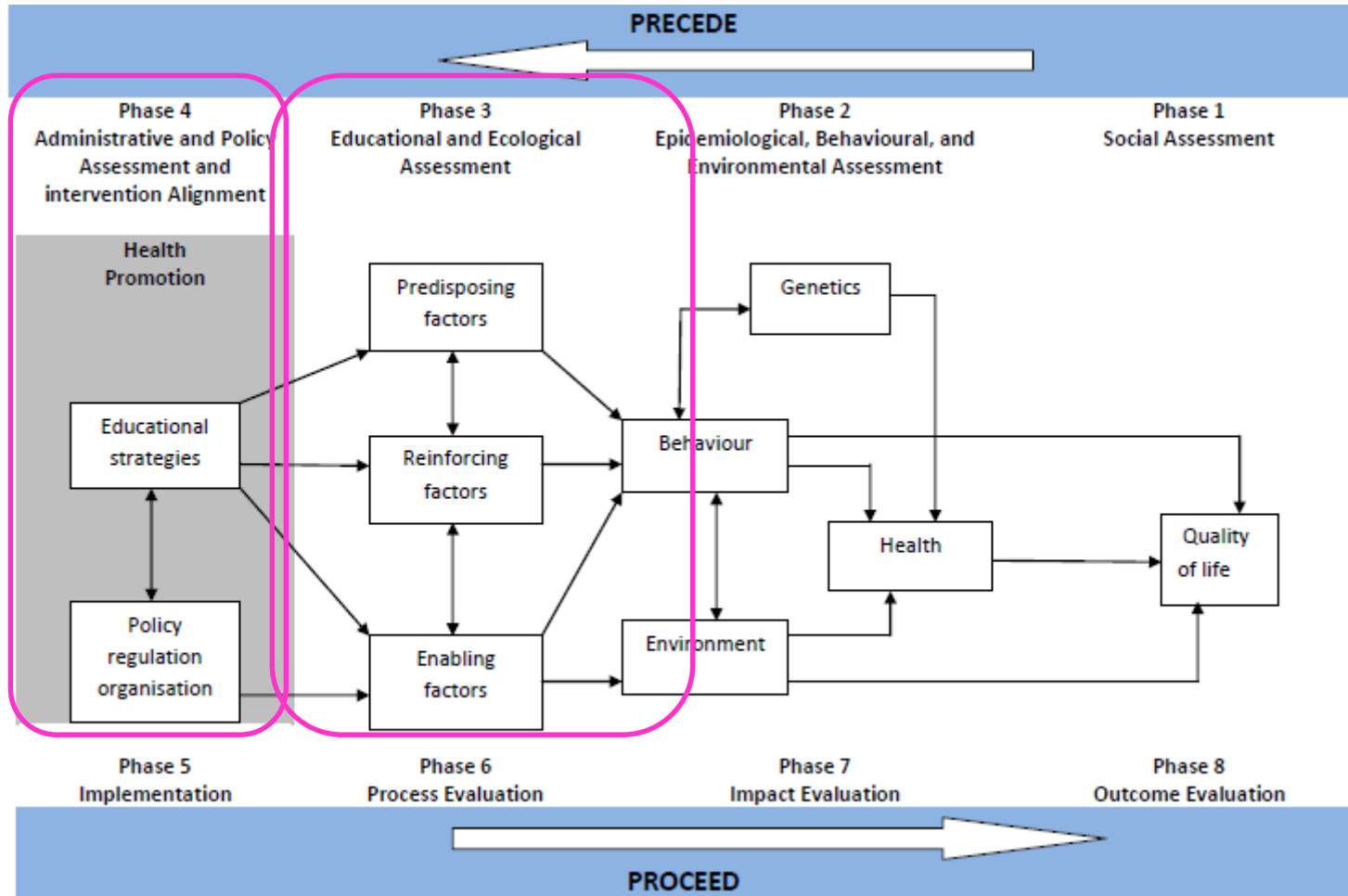
- Clinical Guidelines:
 - Institute of Medicine Guidelines- Recommendations for pregnancy weight gain range based on pre-pregnancy BMI. Advise on individualised weight gain range, diet and physical activity throughout pregnancy and weight monitored
 - NHMRC Antenatal Care Guidelines- all women should be informed of healthy weight gain for pre-pregnancy BMI, weighed and a conversation about healthy eating, physical activity and healthy weight gain each visit.
- 2 systematic reviews including a Cochrane review dietary counselling coupled with weight monitoring can decrease GWG and excess GWG (24 and 34 RCT studies) collectively providing medium to high quality evidence.

What is the Evidence?

- Individual study results consistent enough to inform clinical guidelines
- Studies conducted predominantly in western countries
- Generalisable and applicable to our system

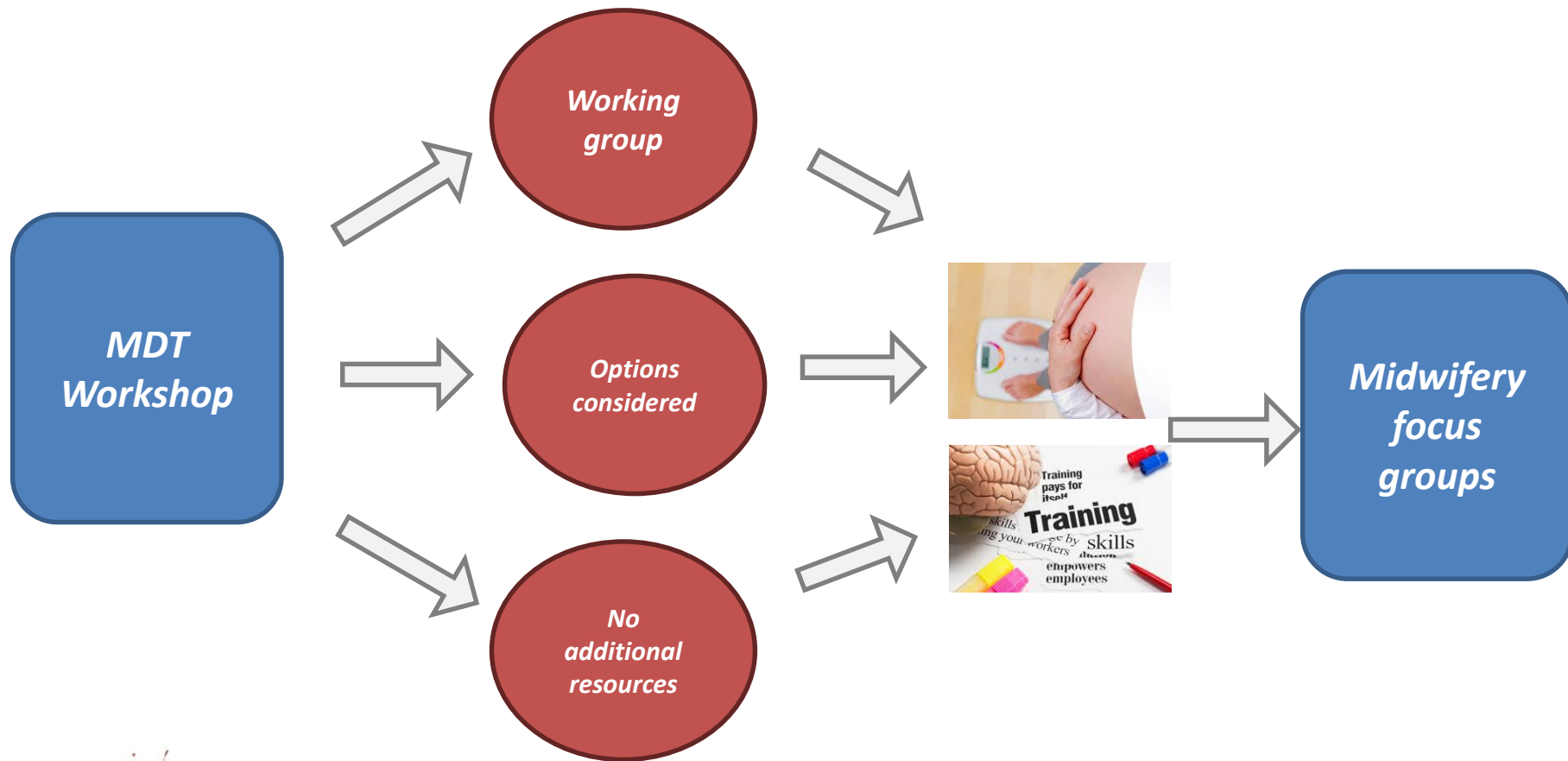


Project theoretical framework



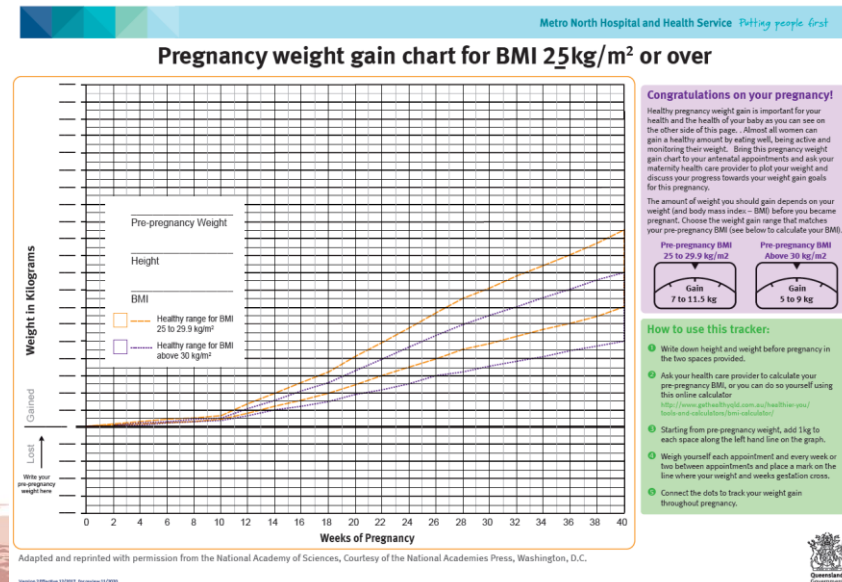
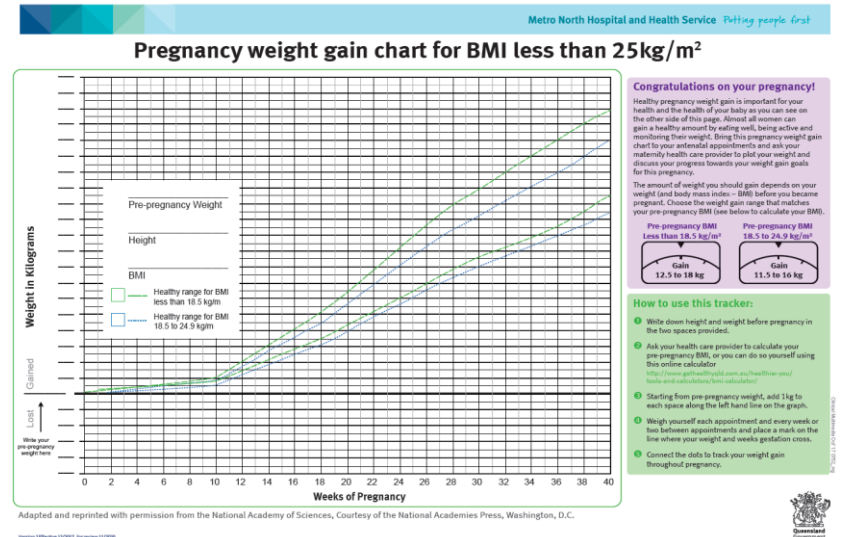
3. Implementing the change

– Healthy Pregnancy Healthy Baby



Pregnancy weight gain chart

- Two resources available depending on pre-pregnancy BMI (<25 kg/m² vs. ≥25 kg/m²)
- Weight gain chart encourages self monitoring
- Self monitoring with behaviour modification supports ongoing behaviour change



Why your weight is important?

Women who are underweight or do not gain enough weight have a risk of preterm birth and a baby small for its gestational age. These can both affect the babies health for the rest of its life.

Women who are overweight or gain too much weight during pregnancy have a higher risk of:

- high blood pressure gestational diabetes
- a large baby (macrosomia)
- difficulty losing weight after their baby is born, which may increase your long-term risk of diabetes, heart disease and some cancers
- a baby who is overweight in childhood and as an adult.

What should I do if I am not gaining enough weight?

Sometimes women who have morning sickness early in pregnancy find it difficult to gain enough weight. Sometimes they even lose a small amount of weight. If this happens to you, you do not need to be concerned as long as you start to gain weight in the second trimester of your pregnancy. It is important to have three meals a day, and also have between-meal snacks, such as morning tea, afternoon tea and supper.

Good snacks include:

- fruit toast
- dried fruit, nuts, and seeds
- yoghurt
- muesli bars
- cheese & crackers
- milk drinks

If you are unable to eat well due to nausea or vomiting and are losing weight or you are not gaining enough weight ask your midwife for a referral to see an Accredited Practising Dietitian.

What should I do if I am gaining weight too quickly?

To control your weight gain, limit foods that are high in fat and sugar. Make sure you are not 'eating for two' and eating plenty of vegetables with at least two of your meals. Try snacking on fruit or reduced fat yoghurt.

Limit the amount of fat you eat by:

- limiting biscuits, cakes, chips, and crisps
- reducing the amount of fat (such as oil, cream and sour cream) in cooking
- choosing low fat dairy products (e.g. milk, yoghurt)
- trimming fat from meat before cooking, removing skin from chicken
- using healthy cooking methods like grilling, steaming, baking
- limiting high fat takeaway foods.

Limit high sugar foods by:

- drinking water, not soft drink or cordial
- using 'diet' or low joule products
- limiting fruit juices to one glass per day as these are high in sugar (even 100% juice)
- limiting chocolates, lollies, sweets and desserts.

Listen to your hunger cues and only have a snack if you are actually hungry. Watch your serve sizes, especially of foods like rice, pasta, potato and meat.

Being active during pregnancy

To get the most health benefits, a good goal is at least half an hour of physical activity each day. You do not have to do it all at once. Your activity can be spread over the day, in ten or fifteen-minute blocks. Making small changes to reduce sitting time and increase your activity in small bursts is also beneficial. For example, parking the car two blocks from work or taking the stairs instead of a lift. Discuss with your midwife or doctor if you have concerns about physical activity.

If you would like more support for a healthy weight gain in pregnancy ask your midwife for a referral to an Accredited Practising Dietitian.

For more information about eating well in pregnancy or to manage your pregnancy weight gain please see the following resources.

Healthy weight gain and healthy eating during pregnancy:

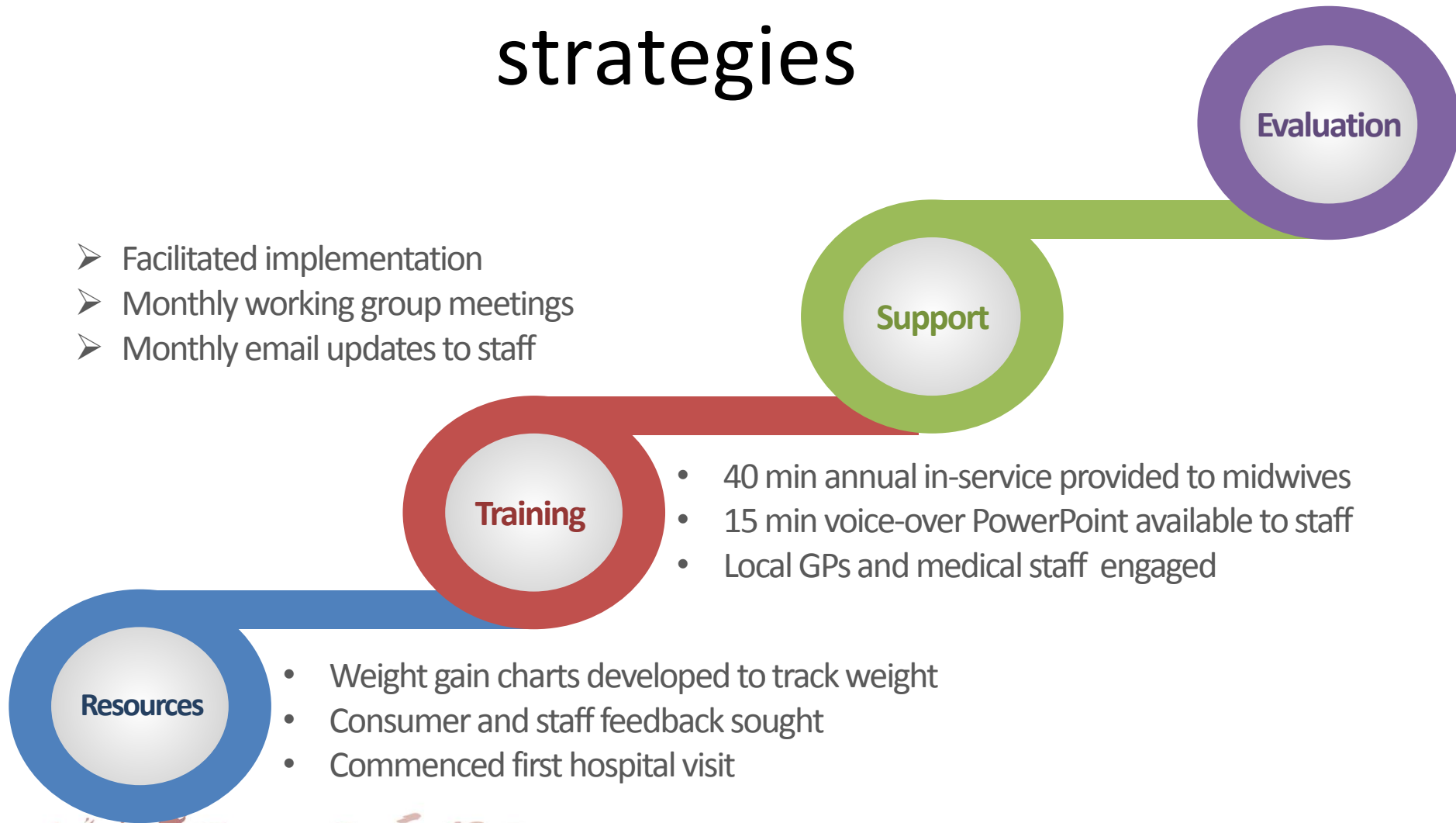
https://www.health.qld.gov.au/_data/assets/pdf_file/0028/154792/antenatal_weightgain.pdf



Partnership with Consumers - National Standard 2 (2.4.1)
Consumers and/or carers provided feedback on this publication.
CPN 2014/560

Multiple implementation strategies

- Facilitated implementation
- Monthly working group meetings
- Monthly email updates to staff



Training

- 270 midwives
first 12 months
- 70-97% increase in knowledge
- 83-91% increase in confidence
- 100% would recommend the training to others
- 97% agree training provided useful communication strategies
- ~ 400 GP's

Accepted Manuscript

Supporting healthy weight gain and management in pregnancy –
does a mandatory training education session improve knowledge and
confidence of midwives?

Dr Susan J. de Jersey PhD , Jeanette Tyler , Taylor Guthrie ,
Dr Karen New PhD

PII: S0266-6138(18)30198-0
DOI: [10.1016/j.midw.2018.06.025](https://doi.org/10.1016/j.midw.2018.06.025)
Reference: YMIDW 2301



Women's experience

'I really enjoyed being able to check my weight each week, it was reassuring to know that even though I felt huge, everything was normal.'

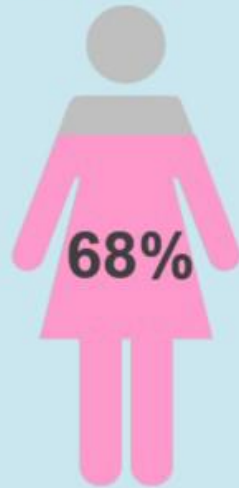
'I was half way through my pregnancy, the midwife looked at my chart and said I was gaining weight a little too quickly. It was good to have that comment said to me because from then on I was more observant of weight I was gaining.'

'I received the wrong chart, which caused me to think I gained way too much, which was not the case. I do feel it's a bit of a 'stress factor.''



Process outcomes

Audit Pregnancy Weight Gain Chart



68%

n=291



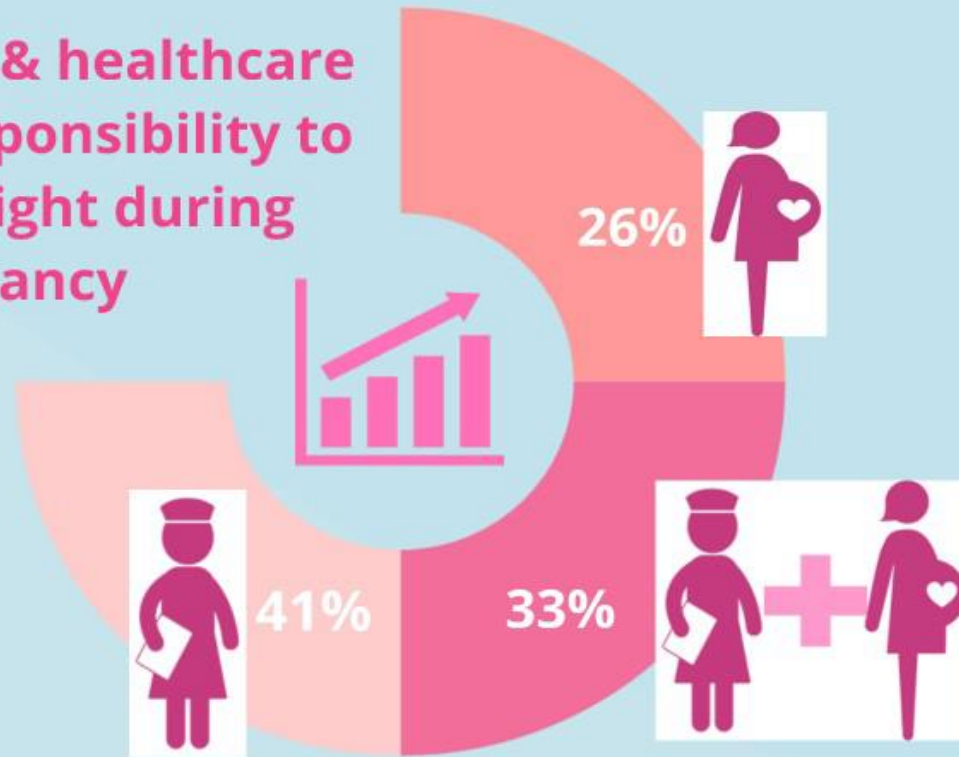
57%



36%

Staff responsibilities

60% woman's & healthcare provider's responsibility to monitor weight during pregnancy



Impact-Advice received at 36 weeks

Advice item	HCP 2010 sometimes/usually/always (n=492) % (n)	Midwives 2016 sometimes/usually/always (n=240) % (n)	Drs 2016 sometimes/usually/always (n=240) % (n)
The health care professionals who have cared for me since I became pregnant ...			
encourage me to weigh myself regularly	11 (53)	40%↑*	17%↑*
check how much weight I have gained	35 (174)	53%↑*	31%↑*
offer advice about how much weight I should gain in my pregnancy	26 (128)	43%↑*	21%↑*
offer me advice about how to gain the right amount of weight in my pregnancy	17 (81)	32%↑*	14%↑*
make me feel uncomfortable about my weight pregnancy	6 (28)	10 (26)	8 (19)

*significant difference between 2010 and 2016 data, $p < 0.001$

Outcomes- Gestational weight gain

No
difference

BMI < 18.5, BMI \geq 25 kg/m²

Healthy
weight
women

2010
(n=338)

2016
(n=202)

Total GWG at
36 weeks
(kg)

14.2 \pm 5.3

13.3 \pm 4.7

p < 0.05

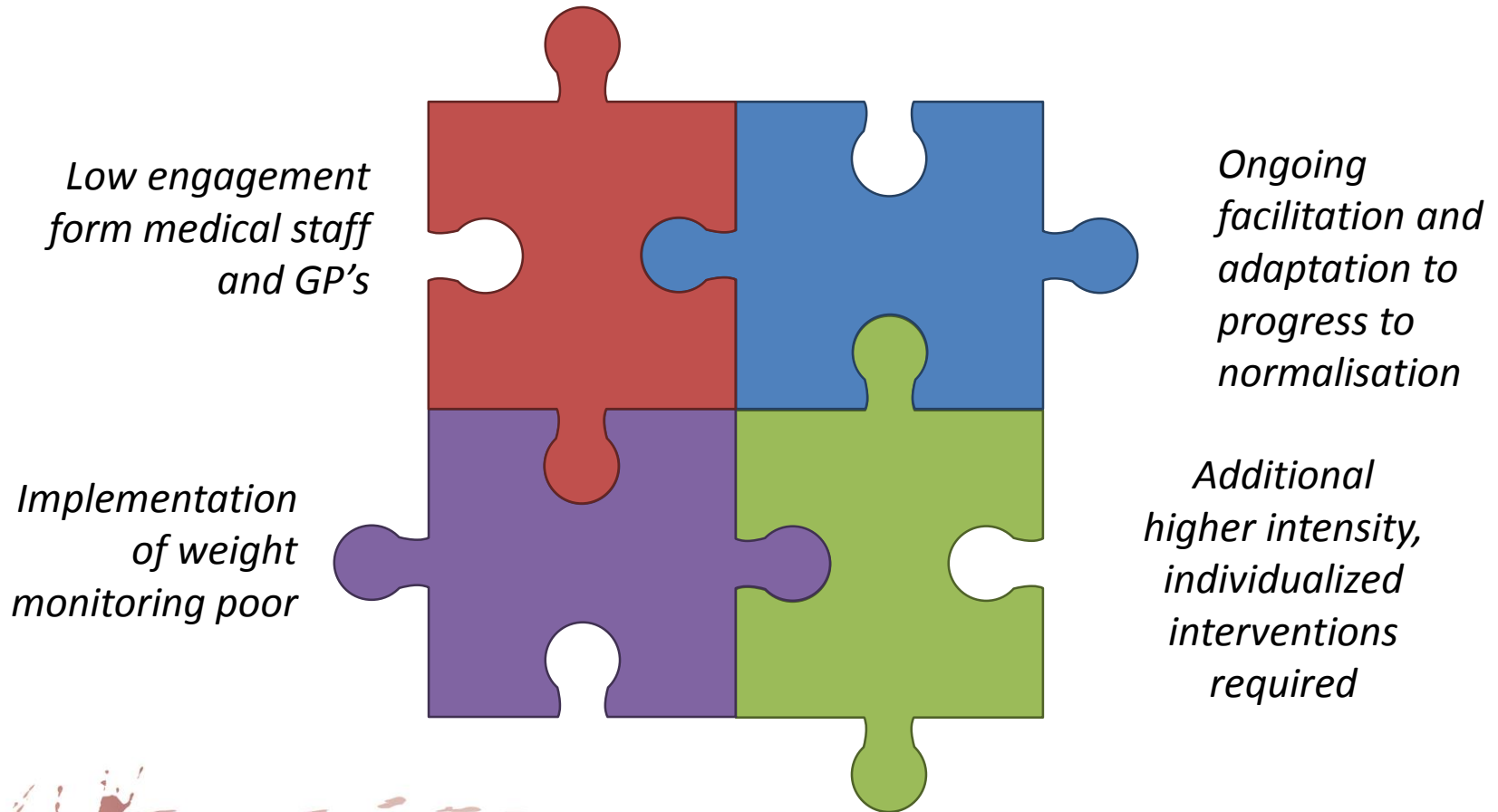
Excess GWG

31%

24%

Hospital based MOC compared to GP care higher healthy GWG
44% vs 29%

An ongoing cycle



Conclusion

Positive changes in practice can be achieved- stakeholder engagement, persistence and leadership important

Low cost low intensity can influence outcomes for some- perhaps not all



Higher intensity interventions for those most at risk

Ongoing need to address implementation issues

