

Evidence -based diabetes self-management education as an intervention to increase patient activation.

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Diabetes WA

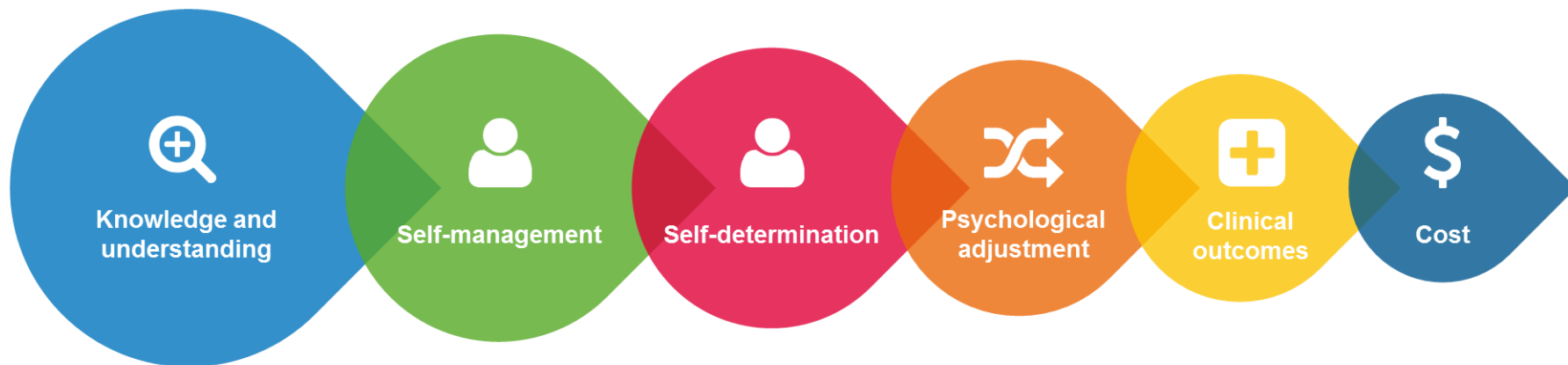
Self-management for chronic conditions

- Self-management education crucial for effective management of chronic conditions
- Structured diabetes self-management education (SDSME)
 - Prevent short-term complications of diabetes
 - Reduce risk of long-term complications
 - Reduce burden on healthcare system
- *Good quality programs → quality in = quality out*

Measuring quality: NDSS Standards for SDSME

- NDSS developed Quality Standards
- Evaluation framework identified key outcomes, which informed the development of objectives for SDSME
 - *Quality* of NDSS programs/services
 - *Impact* of NDSS programs/services
- Programs meeting standards identified for national roll out
- *Standards + Evaluation Framework* →
 - Enabled nationally standardised approach to delivery and evaluation of SDSME programs under the Scheme across all states.

Self Management Services Evaluation Framework



Improved:

- Knowledge and its application

Improved:

- Problem solving skills
- Practical skills (Insulin injections)
- Monitoring
- Medication taking
- Physical activity
- Nutrition skills
- Monitoring risks

Improved:

- Self-efficacy
- Empowerment
- Coping skills
- Level of confidence with diabetes self-management
- Participation in goal setting and decisions

Measured by:

- Diabetes Empowerment Scale – short form (DES-SF)

Improved:

- Well-being
- Quality of life
- Mental health state
- Healthy coping

Decreased:

- Diabetes distress

Measured by:

- Problem Areas in Diabetes (PAID)

Improved:

- Biochemical
- Physical health

Decreased:

- complications

Measured by:

- Patient Activation Measure (PAM)

Decreased Economic Burden:

- Individual
- Societal

Measured by:

- Patient Activation Measure (PAM)

Adapted from Figure 6 and Table 8 of Eigenmann and Colagiuri (2007). See also Eigenmann, Colagiuri, Skinner, and Trevena (2009) and Eigenmann, Skinner, and Colagiuri (2011).

DESMOND



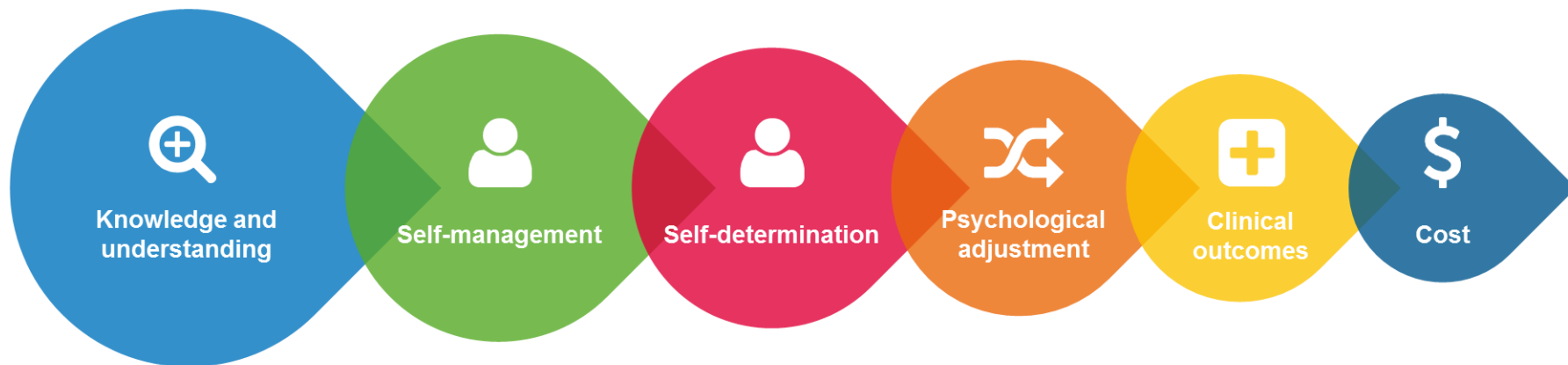
- *Diabetes Education and Self-Management for Ongoing and Newly Diagnosed*
- Only comprehensive SDSME for type 2 in Australia that met the Standards
- Rigorous quality development program
 - Recognition of the impact of facilitator behaviour on the participant outcomes and the fidelity of the program
- Utilises 3 theories of learning
- Based on person-centred philosophy of care
 - People want to maximise their quality of life
 - People are ultimately responsible for their own self-management
 - The barriers to self-management are in a person's world
 - The consequences of chronic disease are experiences by the person with the disease

DESMOND

- Developed in the UK
- Launched in WA in June 2011
- Delivered nationally (except NT) and in New Zealand since July 2017
- Evaluated nationally since 2016 using nationally standardised measures and evaluation tools
- Robust national data set ($n = 2,385$)



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Diabetes Empowerment

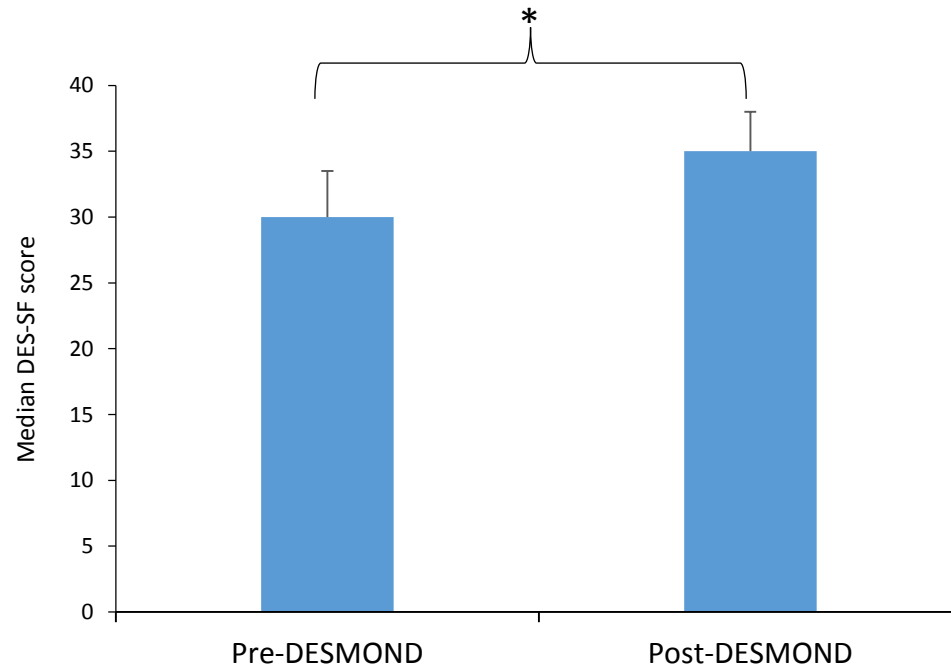


Figure 1. Changes in empowerment before, and after, participation in the DESMOND program (n=1,591)

* $p < 0.001$

Diabetes Distress

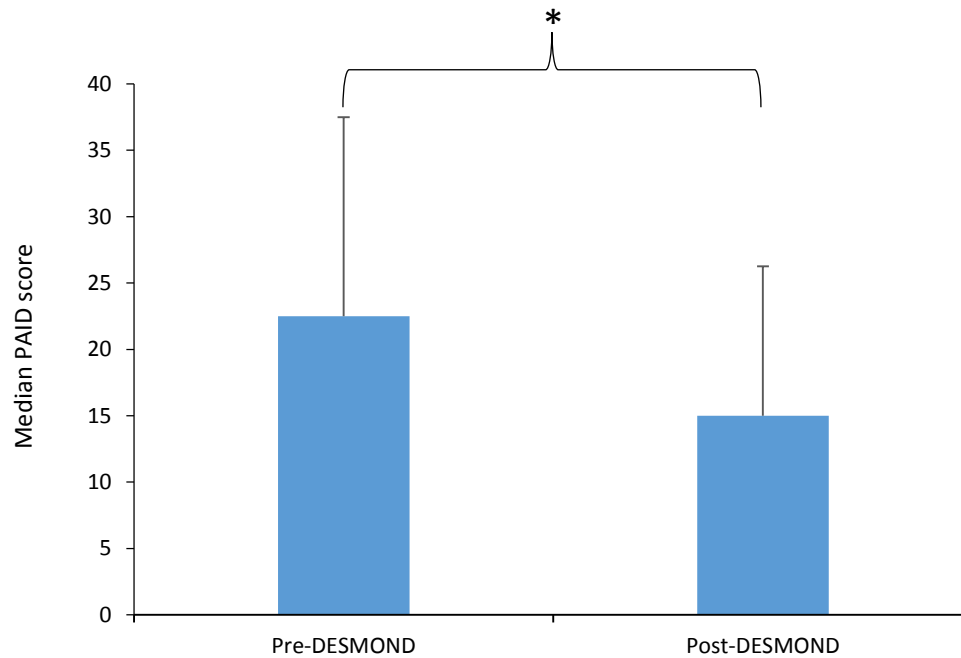


Figure 2. Changes in diabetes distress before, and after, participation in the DESMOND program (n=1,473)

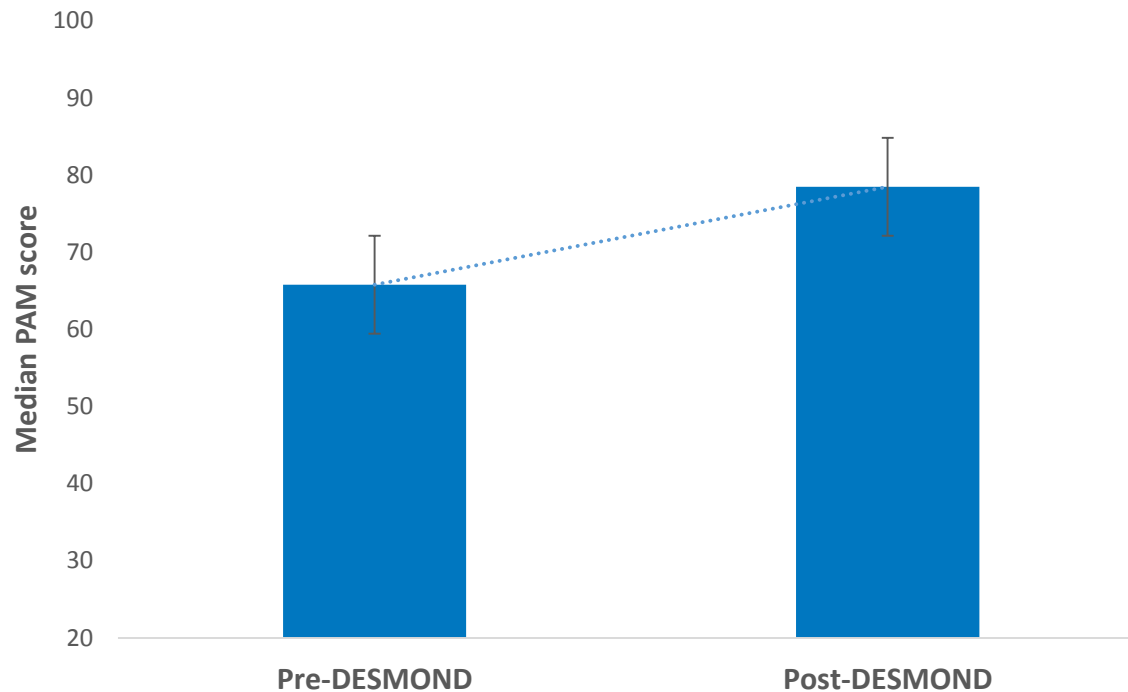
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DESMOND and Patient Activation

- Philosophy of care and objectives of DESMOND align with patient activation
- Can DESMOND increase patient activation?
- Piloted use of Patient Activation Measure (PAM)
 - DESMOND programs delivered in rural and remote Western Australia.
 - Between January and June 2018
- *233 respondents with pre- and post-session PAM data*

Effect of DESMOND on PAM scores

- 70% of participants reported improvement in activation at program cessation
- Median PAM score of participants increased by **9.7** points, from **65.8** at pre, to **75.5** at post.



Effect of DESMOND on PAM levels

Level	Activation	Pre-session		Post-session	
		n	%	n	%
1	Disengaged and overwhelmed (<i>"My doctor is in charge of my health"</i>)	14	6.0	2	0.8
2	Becoming aware, but still struggling (<i>"I could be doing more"</i>)	48	20.6	16	6.9
3	Taking action (<i>"I'm part of my healthcare team"</i>)	100	42.9	76	32.6
4	Maintaining behaviours and pushing further (<i>"I'm my own advocate"</i>)	71	30.5	139	59.7
	Total	233	100	233	100

- 20 people moved from Level 2 to Level 3
- 20 people moved from Level 2 to Level 4
- 55 people moved from Level 3 to Level 4
- 1 person moved from Level 1 to Level 4

What this means

- Significant positive effect on patient activation from attending DESMOND
- Benefits to the individual
 - Greater confidence and ability to self-manage
 - Better clinical outcomes
- Benefits to the broader health system
 - Higher levels of activation linked to reduced cost to the health care system
 - Decreased likelihood of hospitalisation; fewer A&E presentations; less hospital re-admissions

What next?

- Increases in patient activation maintained over short- and long-term?
- Dosage effects of SDSME on activation and other outcomes
- What else can influence activation?
 - Mental health
 - Social determinants of health
 - Presence of multiple chronic conditions

Questions?

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