

# BRIDGING THE GAP: PILOTING INTEGRATED CLINICAL HEALTH PSYCHOLOGY AND YOUNG ADULT DIABETES SERVICES IN WREXHAM

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## ABSTRACT

This poster details the service design and outcomes of a pilot project within the Wrexham Young Adult Diabetes service, where a Clinical Psychologist worked as an embedded team member for two years (2016-2018).

Key components of the project included the use of psychosocial screening measures for all patients, fully integrated multi-disciplinary clinics, a rapid assessment and intervention model for patients aged 18-30, complex case risk formulation and staff training.

Psychosocial screening data was collected on 101 patients and indicated that 18% of patients experienced clinical levels of depression, and 24% of patients experienced clinical levels of diabetes distress (primarily emotional burden). Screening on a smaller sample of patients (N=60) indicated that 20% experienced clinically concerning levels of eating problems.

Pre-post self-report measures indicate that patients who attended for therapy appointments with the Psychologist reported significant improvements in depression and diabetes distress.

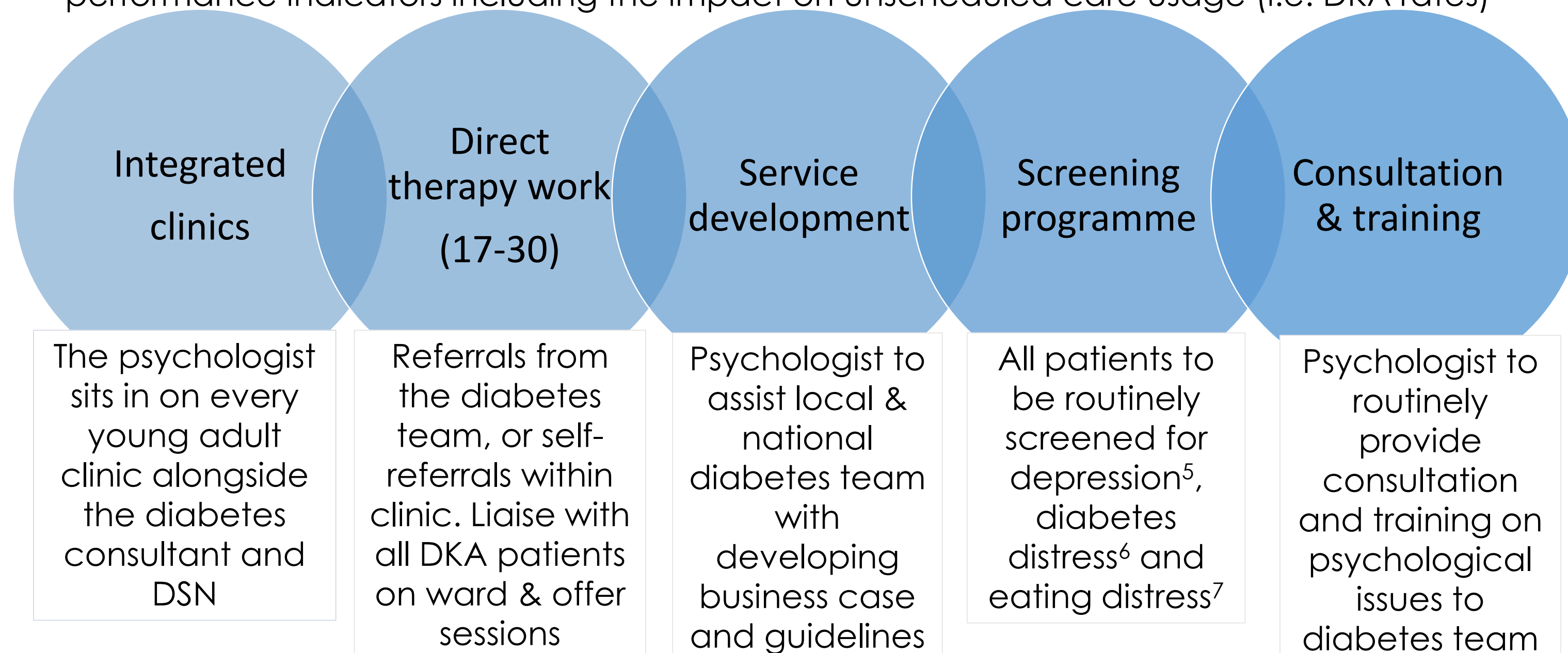
Data from unscheduled care usage shows that in the duration of the pilot project the Diabetic Ketoacidosis (DKA) admission rate for the age group covered by the project reduced by over 40%, and the number of repeat DKA admissions dropped to zero.

## STUDY CONTEXT

- High rates of psychological distress are frequently observed in people living with chronic physical health conditions, however many people living with chronic conditions are unable to access psychological support as their distress is either considered to be a direct result of their physical health condition, or they do not meet criteria for generic adult mental health services.
- The integration of physical and mental health services has been outlined in numerous high profile documents as a key mechanism to improve quality of life, health outcomes and deliver cost savings to the NHS<sup>1, 2</sup>
- Transition between paediatric and adult services can be a difficult and stressful time, particularly when adult services have fewer resources to support struggling patients. DKA admission rates are highest in young adults and peak around the time of transition<sup>3</sup>. The average cost in the UK for one DKA admission in 2014 was £2064<sup>4</sup>.
- The Adolescent and young adult service in Wrexham developed a model of transition in 2012 that is considered a UK 'gold standard'. At the time of the project's inception the service had no access to specialist diabetes psychology input, and support to highly distressed individuals was being provided by diabetes staff with no specialist training.

## PILOT SERVICE DESIGN

- Project aim:** to pilot a fully integrated diabetes/psychology service and collect data on key performance indicators including the impact on unscheduled care usage (i.e. DKA rates)

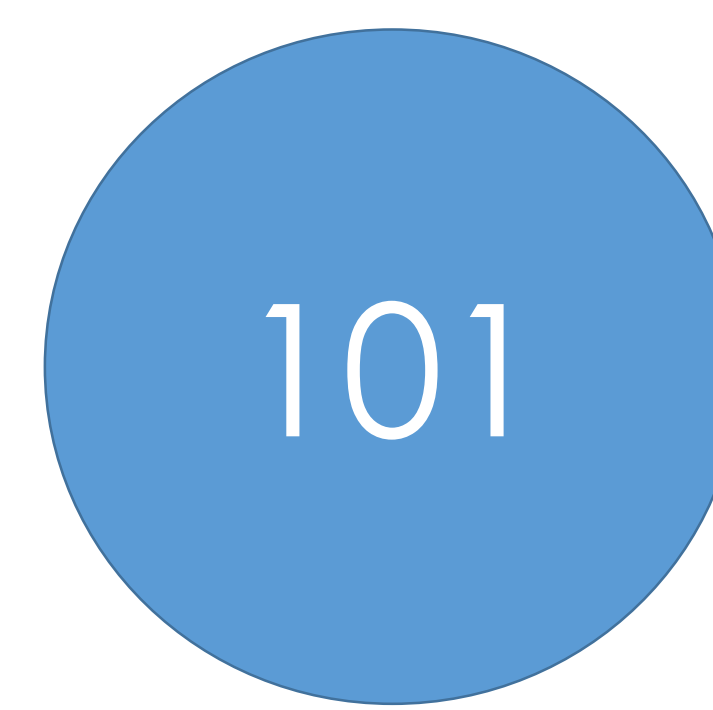


## REFERENCES

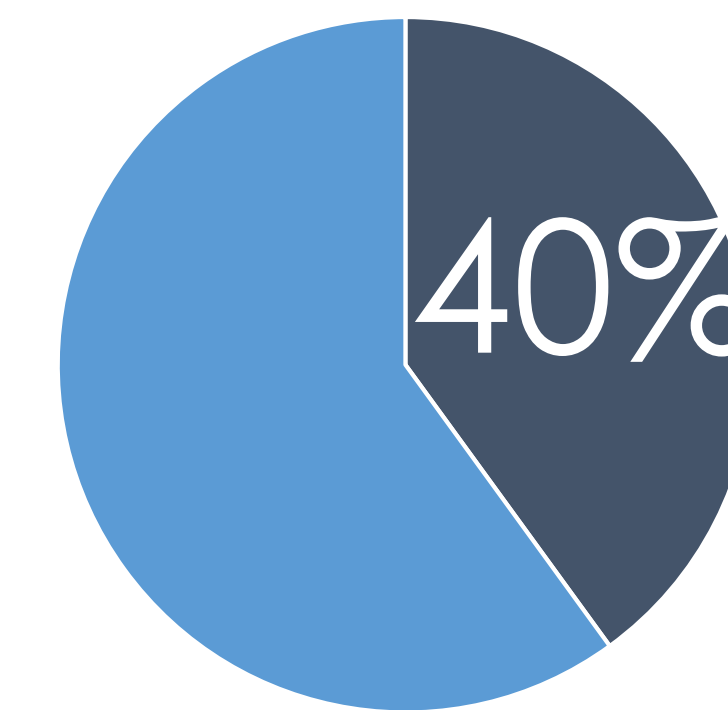
- NHS England Mental Healthy Taskforce (2016). The Five Year Forward View for Mental Health. February.
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## KEY FINDINGS

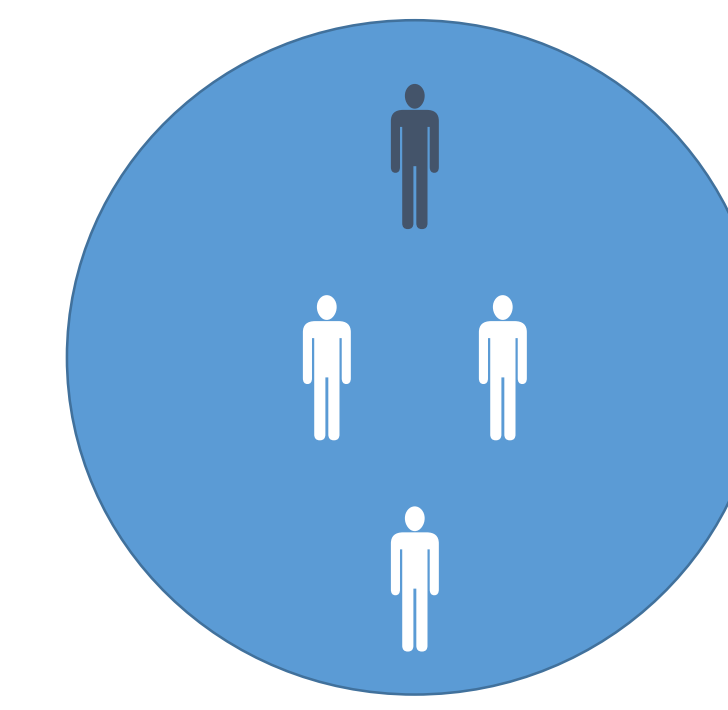
### Screening data



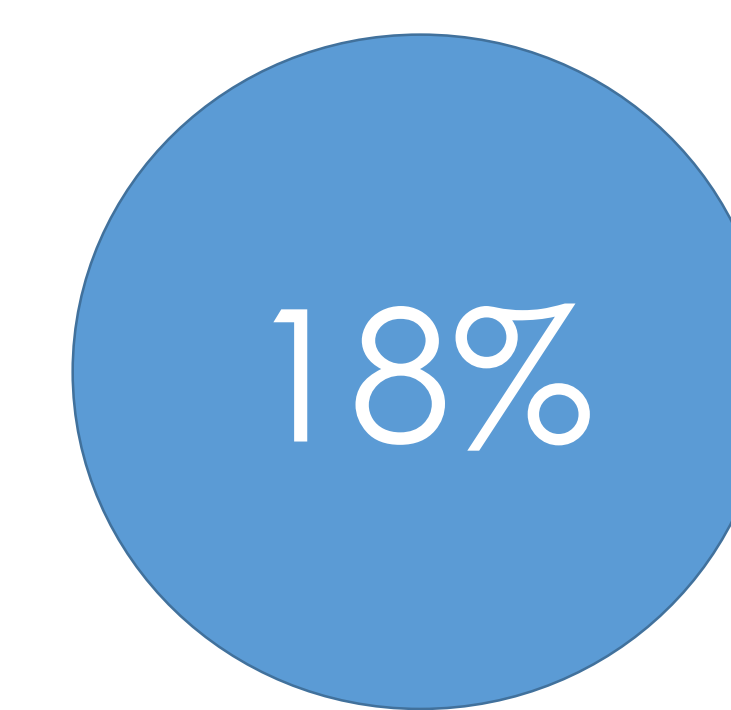
101  
Patients screened over 20 months at every diabetes clinic attendance



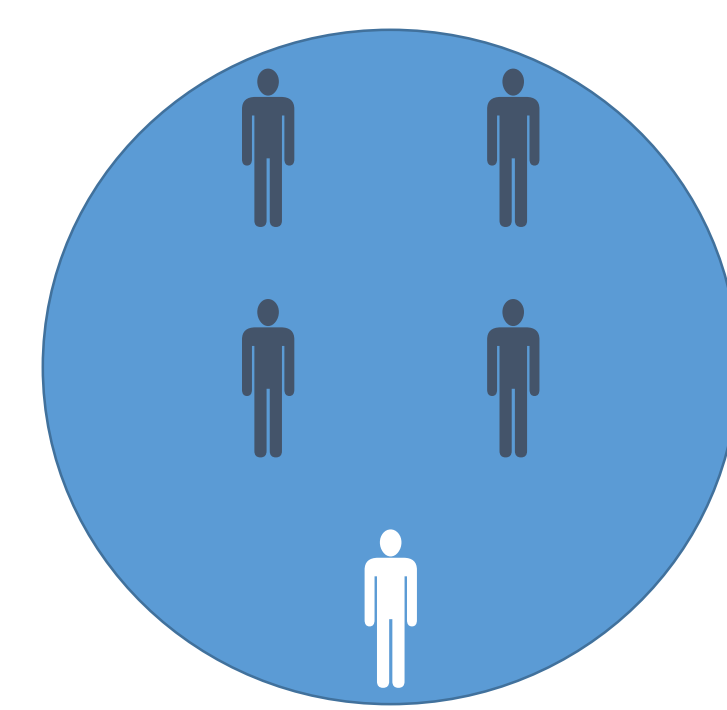
40%  
Of patients experiencing significant emotional distress due to diabetes<sup>6</sup>



1 in 4 patients in clinical range for diabetes distress<sup>6</sup>



18%  
Of patients in clinical range for depression<sup>5</sup>



1 in 5 patients reporting concerning levels of eating distress<sup>7</sup>

### Direct therapy work

Outcome	Pre-therapy mean (SD)	Post-therapy mean (SD)	Statistically significant?	Effect size
HbA1c	95.2 (25.25)	93.4 (23.89)	No	
PHQ-9 <sup>5</sup>	10.7 (6.39)	5.85 (4.84)	Yes $t(29)=2.64, p=0.0066$	0.76
DDS Total <sup>6</sup>	3.11 (0.87)	2.4 (0.88)	Yes $t(34)=2.46, p=0.01$	<b>0.81</b>
DDS Emotional Distress <sup>6</sup>	3.87 (0.84)	2.78 (1.06)	Yes $t(33)=3.44, p=0.0008$	<b>1.3</b>
DDS Physician Distress <sup>6</sup>	1.64 (1)	1.51 (0.74)	No (due to floor effect)	
DDS Regimen Distress <sup>6</sup>	3.84 (1.14)	2.68 (1.04)	Yes $t(32)=3.18, p=0.0016$	<b>1.02</b>
DDS Interpersonal Distress <sup>6</sup>	2.54 (1.38)	2.47 (1.41)	No	

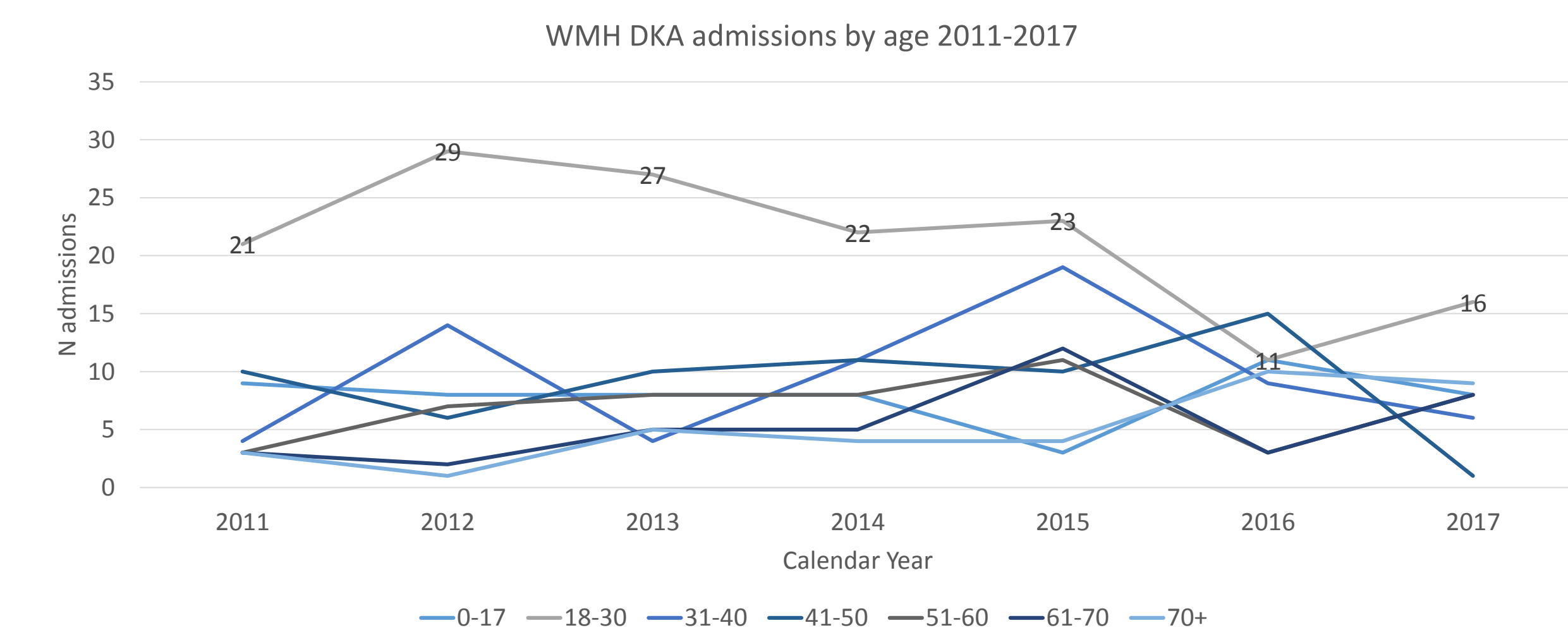
Average direct therapy session attendance rate **78%**

**4.5** mean number of sessions per patient (range 1-23)

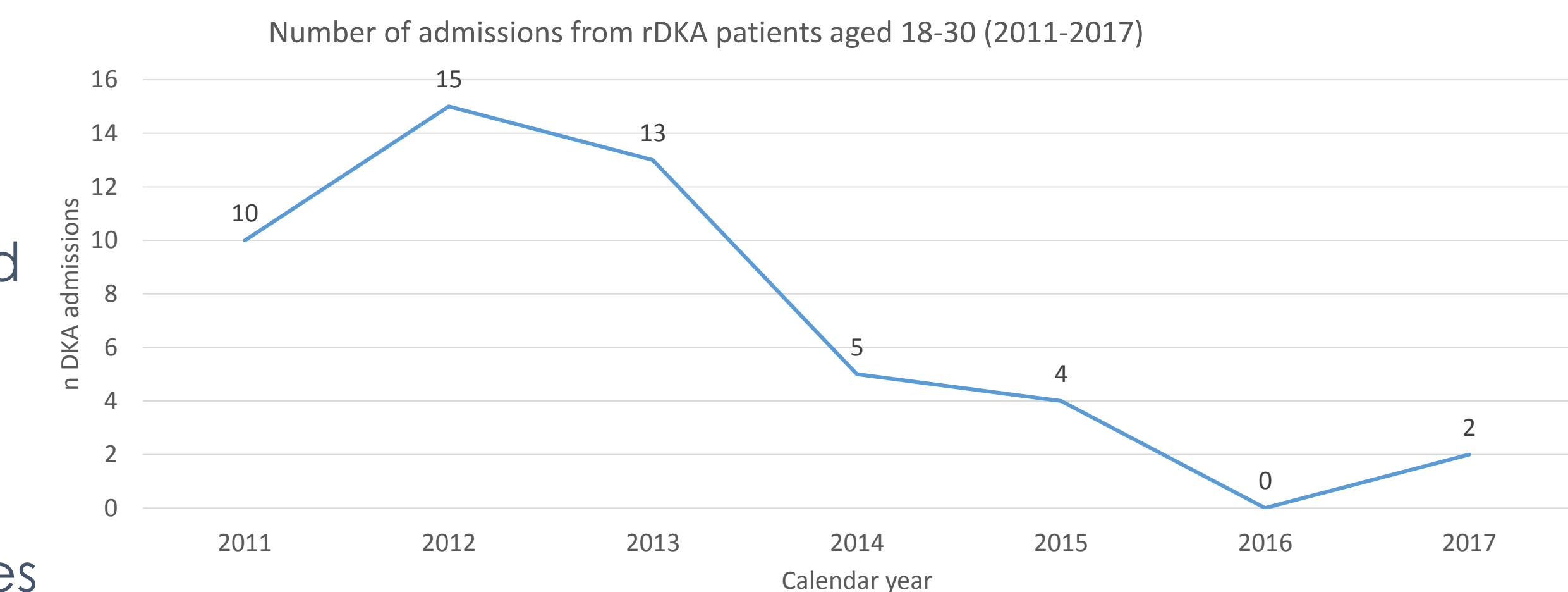
**Lowest DKA rate** for all working adult age groups in first year of project

**Presence of psychologist had no detrimental effect** on clinic attendance rates

### DKA admissions



### Repeat DKA rates



## CONCLUSIONS

- Screening identified a high level of significant psychological distress that in the vast majority of cases was not being addressed by generic mental health services.
- Individual psychology sessions were well attended, and had significant positive effects on depression and diabetes distress.

- The added impact of integrated psychology may have strengthened an already decreasing DKA and repeat DKA trend; it is likely that a permanent integrated diabetes psychology service with a specialist area of focus on young adults and transition could result in a continued reduction in DKAs, and could make additional long-term cost savings via reduction in admissions, chronic mental health issues and future diabetes complications.

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5. Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: validity of a brief depression severity measure. *Journal of general internal medicine*, 16(9), 606-613.

6. Polonsky, W. H., Fisher, L., Earles, J., Dudl, R. J., Lees, J., Mullan, J., & Jackson, R. A. (2005). Assessing psychosocial distress in diabetes: development of the diabetes distress scale. *Diabetes care*, 28(3), 626-631.

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