Evidence review of the effectiveness of weighted financial remuneration to increase universal and targeted uptake of NHS Health Checks

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INTRODUCTION

Ensuring high uptake of NHS Health Checks is key to optimising the clinical and cost effectiveness of the programme. High uptake is particularly important for populations with the greatest health needs and impacts the programme’s abilities to address health inequalities.

Aim of the review: To understand whether weighting financial remuneration to NHS Health Check providers affects both the uptake of checks and the demographics of people taking up the offer of a check.

RESULTS AND DISCUSSION

Seven papers were identified through the review. Of those, few had high methodological rigour, with the most common methods reported being case study (2) and qualitative (2).

Where evaluated, universal incentivisation for patients to attend an NHS Health Check did not translate to increased uptake of checks¹. However, there are a small number of papers describing case studies where weighting remuneration to providers has demonstrated improvements in the overall uptake of NHS Health Checks.²³

REFERENCES


ACKNOWLEDGEMENTS

This work was supported by the Public Health England Behavioral Insights Team and NHS Health Check Team.
Making remuneration pay; using weighted financial remuneration for NHS Health Checks to increase universal and targeted uptake

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INTRODUCTION
Ensuring high uptake of NHS Health Checks is key to optimising the clinical and cost effectiveness of the programme. High uptake is particularly important for populations with the greatest health needs and impacts the programme’s abilities to address health inequalities.

Aim: To understand the current and potential use of weighed remuneration for NHS Health Checks.

METHODS
An online survey was designed to capture current practice and to assess the individual’s agreement/disagreement with a series of behaviourally designed statements, mapped to the COM-B framework. The areas identified as using weighted remuneration were invited to provide a case study.

RESULTS
The survey had a 40% response rate (62 local authorities). Standard activity based payments were shown to have a mean average of £24.90, (range of £15-50 n=24). Few commissioners use weighted remuneration for NHS Health Checks.

The most common characteristic used to determine remuneration tiers was patient deprivation. The majority of areas used a combination of characteristics to define their ‘priority’ population.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>No local authorities using characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deprivation</td>
<td>5</td>
</tr>
<tr>
<td>Severe mental illness</td>
<td>2</td>
</tr>
<tr>
<td>Learning disability</td>
<td>2</td>
</tr>
<tr>
<td>CVD risk score</td>
<td>3</td>
</tr>
<tr>
<td>Clinical history</td>
<td>1</td>
</tr>
<tr>
<td>Carer</td>
<td>1</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>3</td>
</tr>
<tr>
<td>Outcome of check</td>
<td>1</td>
</tr>
</tbody>
</table>

Five areas currently using weighted remuneration provided case studies; Cornwall, Brighton and Hove, Nottingham, Wigan, Hull which are available as practice examples.

CONCLUSIONS
Due to the small number of areas using weighted remuneration, it is not possible to assess the impact on universal and targeted uptake compared to other methods. However, case study examples illustrate where the use of weighted payments had successfully led to greater equity of checks through improving uptake in priority groups.

There is potential for greater impact if behavioural science was applied in the design of financial incentives.

ACKNOWLEDGEMENTS
This work was supported by the Public Health England Behavioral Insights Team and NHS Health Checks Team.

REFERENCES

FULL REPORT AVAILABLE AT: WWW.HEALTHCHECK.NHS.UK
THE SOUTH GLOUCESTERSHIRE DIABETES PREVENTION PILOT PROJECT (SGDPP)

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### Background

The prevention of Type 2 Diabetes (T2D) is a public health priority – one in ten people are estimated to develop T2D by 2034 [1]. South Gloucestershire has a population of 260,000 with 25 GP practices. Within this population, between 2014/15 and 2015/16:
- diabetes prevalence increased by 6.29%;
- 511 (8.5%) patients had a raised HbA1c identified during routine Health Checks.

The SGDPP was developed in response to this need:
- NICE recommends intensive lifestyle change programmes for ‘at-risk’ individuals, to prevent or delay the onset of T2D [2].
- The X-POD education programme from X-PERT Health was chosen for delivery (http://www.xperthealth.org.uk).
- 300 patients from one GP surgery were identified as being ‘at risk’ of T2D, meeting specific eligibility criteria. Each patient received an invitation to the locally run six-week programme.
- The pilot project was evaluated six months post-delivery to determine the impact of the intervention.

### Methods

#### Outcome evaluation

Pre-post intervention data was collected and anonymised by SGC, then exported to UWE for analysis using SPSS Statistics Version 22.0. Changes from baseline to six months were assessed for weight, BMI, waist circumference, HbA1c, self-reported physical activity, diet, health status and psychological wellbeing.

#### Process evaluation

Focus groups and interviews were conducted with participants, project staff and stakeholders to assess implementation. Audio-recorded data was transcribed and thematically analysed using NVivo 10.

#### Economic evaluation

Unit cost evaluation of the SGDPP was carried out using data collected from project team and cost information questionnaires completed by the project team.

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### Results

- **Group attendance maintained above 84% over six months.**
- **Significant improvements across main measures of weight and blood glucose levels for the 91 participants who provided data:**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Baseline mean (SD)</th>
<th>6-month mean (SD)</th>
<th>Mean diff. (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight (kg)</td>
<td>93.50 (16.38)</td>
<td>89.45 (16.28)</td>
<td>-0.40* (-5.01, -3.08)</td>
</tr>
<tr>
<td>BMI (kg/m²)</td>
<td>33.81 (5.95)</td>
<td>32.38 (6.10)</td>
<td>-1.43* (-1.77, -1.09)</td>
</tr>
<tr>
<td>Waist circumference (cm)</td>
<td>107.37 (12.22)</td>
<td>102.05 (12.50)</td>
<td>-5.32* (-6.37, -4.27)</td>
</tr>
<tr>
<td>HbA1c (mmol/mol)</td>
<td>42.24 (5.26)</td>
<td>38.79 (3.46)</td>
<td>-3.45* (-4.30, -2.60)</td>
</tr>
</tbody>
</table>

Note: *p<0.001

- **Estimated cost/person = £167 for a six-months programme.**

### Conclusions

Close partnership with stakeholders was crucial to programme success in terms of:
- high acceptability
- reduced risk of T2D
- positive dietary and physical activity impacts
- potential cost-effectiveness

Recruitment, retention and six-month outcomes exceeded initial expectations. This information enables best practice to be embedded locally, forming a robust foundation to support development and rollout of the NHS DPP.

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### References

Prevalence of multi-morbidity in the South West Region of England: estimating multi-morbidity using a scenario-based approach
Olatunde, O and Robery, N.
PUBLIC HEALTH ENGLAND’S LOCAL KNOWLEDGE AND INTELLIGENCE SERVICE (SOUTH WEST)

INTRODUCTION

- Multi-morbidity is the presence of multiple long-term conditions in one person
- Multi-morbidity is now the norm as opposed to the exception among those with long-term conditions
- Current single disease model unfit for purpose – needs to shift to a more integrated approach
- Currently very little information available about the prevalence of multi-morbidity in England

METHODS

Prevalence estimates for 2 or more, 3 or more and physical & mental health co-morbidity given to us by:
- Age
- Sex
- Deprivation – Carstairs decile
Applied to 2011 geographies (local authorities and wards) in the South West

RESULTS

Multi-morbidity and physical and mental health comorbidity increased with age, with women having a higher prevalence than men in all age groups.

CONCLUSIONS

- Multi-morbidity is not just an issue associated with older people, with 46.6% of people with 2 or more long-term conditions in the South West under the age of 65 years.
- High levels of multi-morbidity seen at younger ages highlight the importance of adopting a life-course approach, particularly in the most deprived areas
- Association between multi-morbidity and deprivation highlight need to adopt whole systems/multi-sectorial approach to tackling wider determinants of health
- Disproportionately high prevalence of physical and mental health comorbidity among middle and older age men and women in relatively deprived areas may in part be due to greater fragmentation of care for people with discordant multi-morbidity in deprived areas

ACKNOWLEDGEMENTS

We would like to thank Professor Bruce Guthrie at the University of Dundee and his research team for kindly providing us with the observed prevalence data used in modelling prevalence estimates for local areas in England. Please note that the South West Local Knowledge and Intelligence Service is solely responsibility for the findings, interpretations and recommendations made in this poster.

REFERENCES

Aims and Objectives

To evaluate whether TP2 addressed HI through promoting systems thinking

Objectives

• Explore if TP2 promoted or deterred systems thinking between schools and PHP
• Identify specific changes resulting from the implementation of TP2

Key research question

Did implementation of TP2 promote or deter systems thinking between schools and PHP?

Main findings

A root definition was developed from the emergent themes using the CATWOE model.8

Addressing HI (output) through systems thinking (the transformation) requires time, networks, sharing knowledge and resources. (input)

Discussion

TP2 resulted in synergy and promoted systems thinking between multiple-stakeholders
Further research is required to determine the impact on schools with different characteristics, and serve communities with different needs
Longitudinal evaluation is required to determine long-term impact

References

1.
2.
3.

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