Brain States.

Mental Health and Wellbeing in the Public Sector.

Cari© 2020 Vision Project

Public Sector Pilot Initial Findings

Executive Summary January 2020

RESEARCH CONDUCTED BY
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Wellbeing with Cari

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Introduction: The Cari® 2020 Vision Project

Our Aim

The Cari 2020 Vision Project was initiated by Maria Paviour Company Ltd (MPC Ltd), and supported by a number of public sector organisations. It aims to improve the mental health of 1 million workers across the UK.

Data from Deloitte's[1] has shown that the public services has the highest level of severe stress of any sector. Although there is a growing awareness of the problem, there has been little research into methods that may create significant improvements that can be implemented within tight local authority government budgets.

Methodology – Use of Artificial Intelligence, Cari®

Cari® began life over 20 years ago as a method of measuring and supporting the wellbeing levels of people in the workplace. In 1997 the first iteration of Cari® software was launched in the UK and later also in France (a bi-lingual version), providing an analysis of stress levels and supportive and tailored solutions. This software won three awards in 1997 and 1998; two UK Government and one European Award.

Since then, Cari has developed into an online tool that confidentially measures and gives tailored guidance and feedback to employee users. She has already been offered to circa 28k people to provide her analysis and feedback.

For this project Cari® has evolved into artificial intelligence. This means she can provide one-to-one consultations with individuals that are totally confidential.

Engaging people in using Cari

The public sector organisations sent all their employees an email informing them of the initiative, and inviting them to participate in a consultation with Cari. Cari then emailed each person inviting them to log into a consultation with her.

Employee users were then walked through the process, which involved explanation of the confidentiality of the consultation, and an opportunity to do a 'test run' of the questions.

The consultation took around 10 – 15 minutes per person, notwithstanding the time taken for any support that was provided. Cari users received their feedback immediately and could refer back to their wellbeing analysis as and when they chose.

The analysis methodology

Cari® asked people questions about how they think, and feel, about work; using dichotomous cognitive questioning and reactive ratings. This allowed her to process both consciously considered and "autopilot" responses. She provided deep analysis of these responses as she is able to pick up nuances that would not be easily identifiable by face to face human analysis.

Cari® does not ask the type of questions you would expect in an engagement survey. She asks solely about the individual and their responses in the moment – to get a snapshot of wellbeing – based on perception of experience and internal experiences of the environment and what goes

[1] https://www2.deloitte.com/uk/en/pages/public-sector/articles/mental-health-employers-review.html

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on in it. As such, a wellbeing score for an individual can change very quickly. This is a positive, as it equally enables people to boost their wellbeing levels quickly.

Offering Guidance and Support

Cari® offered insights and support for each individual based specifically on her assessment of their mental health and wellbeing needs – by analysing and identifying the support that would be most appropriate for the individual's levels of brain capability, wellbeing and stress levels.

Cari® provided direct support to individuals that had been assessed as providing an average immediate 'boost' to wellbeing levels of 28.3% through qualitative feedback from a sample of pilot organisation employees. Cari also directed employees to the most appropriate of the current services that each organisation was providing to their employees around mental health and wellbeing; in this way she was able to provide what she identified as the right support, to the right person in the right way.

The research project had a number of key aims:

1. To gather data about public sector employees that could be collated into an overall report into the state of the nation's 'brains' in the relation to wellbeing and brain capability i.e. key indicators that demonstrate if people are performing at their best.
2. To provide information and guidance on how to best manage mental health and wellbeing at work.
3. To provide confidential feedback and reports at board level to each participating organisation in order to support strategic level decision making around supporting mental health (these shall not be published or publicly available).
4. To discover whether employees would engage in mental health consultations with Cari® as Artificial Intelligence.
5. To ascertain if users self-reported a valid experience i.e. believed that they have received an accurate assessment of their wellbeing, tailored support and guidance through Cari®

The Public Sector Pilot

From spring 2019, we worked in co-operation with a number of public sector organisations to roll out Cari®, at no cost to the organisations involved and funded entirely by MPC Ltd as part of its research commitment.

As part of the pilot, 14,373 people across four organisations were invited to take part and receive support through Cari® between April and December 2019.

Reliability and Validity[1]:

Population size: 5.36m[1]
Confidence Level 95% (industry standard)
Sample size: 4157
Margin of error: 2%

The Results

Cari® anonymised the responses of all those who took part in the 2020 Vision Pilot, and the results provide us with a fascinating insight into the levels of mental health and wellbeing of people working in the public sector right now. Cari® is also able to predict where improvements could be made quickly and easily, and using research published in the UK Government Thriving at Work Report, she can put a figure on the millions of pounds of savings that could be made.

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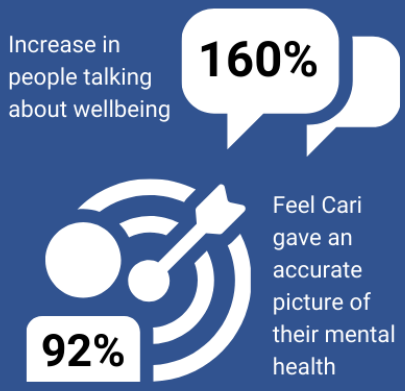
Results.

14,373 people were given access to a confidential, Cari online wellbeing consultation

4157 people engaged in an AI wellbeing consultation and received individualised support

46% employees are operating at a low 'reactive' level of wellbeing, **22%** are 'damaged or ill', and only **32%** are presenting as 'healthy'

Employees brains are functioning at **57%** which means problem solving, decision making and co-operative behaviours are seriously compromised.



Outcomes and ROI.

Performance
57% → 62%

Wellbeing
64% → 69%

Boost overall 8.2%

Predicted saving on the current costs of poor mental health of **£1.7m - 1.8m per year,** or approx **£130** per person, per month

Results would be boosted further with continued use of AI such as Cari

Deloittes' Jan 2020 report states a return of over £10 for every £1 invested in a best practice set of interventions

10 x ROI

If interventions are...

- ✓ Preventative
- ✓ Large scale
- ✓ Use technology
- ✓ Provide tailored support

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HSE Litigation Protection

Pilot organisations have protected themselves from potential litigation, by meeting:

- all of the guidelines for Management of Stress at Work
- 4 of 6 Core Mental Health Standards
- 2 of 4 Enhanced Mental Health Standards

With continued use of Cari, organisations would meet all the recommendations in the Government's Thriving at Work 2017 white paper.

Culture and Performance

Cari assessed the culture in the organisations as **"Resurrecting"**. By working with Cari, they are already experiencing **an increase in workforce wellbeing levels.**

This is because Cari has provided direct support to people and proactively guided them to use the organisation's current services. Therefore driving **more ROI from their existing investments** in mental health and wellbeing

Finance and ROI

Using Deloitte's 2020 data, the current cost of poor mental health across Pilot Organisations is calculated at £27.2m - 31.4m pa. This is increasing all the time. Deloitte's data predicts that organisations will achieve a x10 ROI (and likely higher) if using the best practice set of inverventions.

Applying Deloitte's data, Wellbeing With Cari predicts an annual return of £1.9m pa on an investment of £215,595k. Over a two year term, the total ROI would be circa £3.9m for a total investment of circa £431k

Current costs of poor mental health

£27.2m - 31.4m pa

Annual investment

circa £215k

2 year ROI=

circa £3.9m

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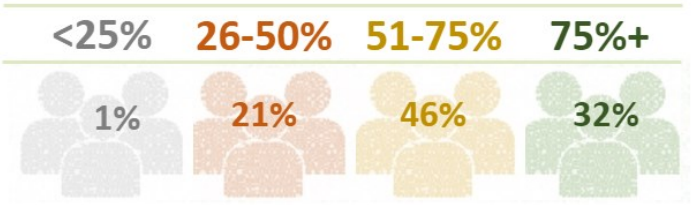
How wellbeing is affecting people and performance in the public sector.

Wellbeing levels

Overall wellbeing level of all Pilot Organisations: 64%

Cari® groups scores into four levels of wellbeing: ill, damaged, reactive, robust.



Wellbeing Analysis

Scores of over 75% would point to robust levels of wellbeing, and a largely healthy, happy population who are performing at their best, and emotionally engaging with those around them.

The wellbeing score of **64%** indicates that people who responded started with a **Reactive** level of engagement and wellbeing.

This means that people across the Pilot Organisations are likely to be demonstrating some or all of the following behaviours:

Nervousness, irritability, feeling sadness or overwhelmed, displaced sarcasm, procrastination, forgetfulness, trouble sleeping, low energy, muscle tension, headaches; intrusive thoughts; occasional nightmares; decreased social activity; regular alcohol use or gambling.

Wellbeing Improvements: 64% → 69%

The survey sample demonstrated an estimated 'boost' in wellbeing levels based on predicted responses to Cari.

The uplift percentage is based upon a number of mediating factors: perceived level of wellbeing, perception of the impact of stress, availability of social support, and compassionate acknowledgement of the stress or impact on wellbeing of work.[2] The improvement was calculations were based on self-reported evidence from a wide range of prior users[3].

The uplifted wellbeing score of the Pilot Organisations is an estimated increase from 64% to 69% . The implications for potential savings based on Deloittes research[4] are explored in the financial summary.

[2] M Paviour, 2008, Cari - its basis in the evidence – Published by MPC Ltd
[3] Intervention report outcomes – MPC Ltd 2019
[4] https://www2.deloitte.com/uk/en/pages/public-sector/articles/mental-health-employers-review.html

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Performance Levels

Cari® analyses specific responses to create the overall Performance Profile. This gauges the brain capability level of people: their abilities to make decisions, problem solve, their attitudes to change, co-operation and creativity. However, this does not analyse levels of skills, competency or experience of the individual.

For people to be working at optimal levels, we estimate that brain capability or performance scores need to mirror wellbeing levels in achieving 75% of more.

Performance Analysis

Pilot Organisations' Performance Score: 57%

The Performance Score of 57% indicates that people are operating at a brain capability level that would be characterised by **significantly compromised or poor levels** of decision making, problem solving, creativity, attitude to change and co-operation.

Performance Improvements: 57% ➔ 62%

The updated Performance Score of the Pilot Organisations is an estimated increase from 57% to 62%

This is based on evidence that worker wellbeing impacts upon performance and that supportive wellbeing information enables behavioural change.[5] [6] The factors used to predict the immediate increase in performance are based on research carried out by MPC Ltd on responses to somatic alterations to the body [7]– these are known as BENDs (or brief emotional non-verbal displays) and access to these are provided to users through video and on-line learning content.

[5] Does Worker Wellbeing Affect Workplace Performance? IZA DP No. 9096 June 2015 Alex Bryson John Forth Lucy Stokes
[6] Knowing What You're Doing or Knowing what to do: How Stress Management Apps Support Reflection and Behaviour Change; Nora Ptakauskaite, Anna L. Cox, Nadia Berthouze. Publication: CHI EA '18: Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems April 2018 Paper No.: LBW599 Pages 1–https://doi.org/10.1145/3170427.3188648
[7] The body keeps the score: Brain, mind, and body in the healing of trauma - BA Van der Kolk - 2015

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Financials and ROI

Before the four Pilot Organisations began working with Cari, estimated costs of mental health across all per annum based on 2017 figures were between £21.3m per annum - £22.8m per annum[8] **.** However, in light of the updated costs as identified in the Deloittes report "Mental health and employers - refreshing the case of investment" (January 2020) it suggests that this is an underestimate as Deloittes figures show a significant increase of 16% in the costs of poor mental health; a rise for our pilot organisations to between £27.2m per annum and £31.4m per annum[9].

Following their involvement with Cari® - an end to end solution offering specific and tailored wellbeing solutions to each user, it is estimated/predicted:

- **Mental health has improved** by an estimated 5 percentage points - an 8.2% increase
- Estimated **mental health costs have fallen** by £1.7-1.8m per annum
- **Existing investments ROI: increased to 10:1 ROI -** Cari increases the ROI received from existing investments in health and wellbeing from an average of 0.4:1 – 6:1, up to 9:1 ROI (based on conservative data estimates provided by Deloittes)[10]
- **Predicted return on investment when using an end to end solution following Deloittes best practice model -** for every 2,000 employees it is predicted that on an investment of £51-£75 per person per annum[11] (for all interventions) you could gain a **ROI of c£1.02m to c£1.5m**

[8] https://www2.deloitte.com/uk/en/pages/public-sector/articles/mental-health-employers-review.html
[9] https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/consultancy/deloitte-uk-mental-health-and-employers.pdf
[10] Typically employee support pages offer 0.4:1 ROI, and health monitoring/advice offers 6:1 ROI. By bringing together your current services into an end to end solution, Cari has increased your return on these.
https://www.gov.uk/government/publications/thriving-at-work-a-review-of-mental-health-and-employers
[11] https://reba.global/content/employers-spend-51-75-per-employees-on-wellbeing-strategies

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Summary

This executive summary provides the top line information from the Brain States Report. The full and detailed report includes:

- Detailed and Deep Dive Culture Assessment of the Public Sector using neuroscience-based models
- A full, in-depth report on organisational wellbeing levels
- Analysis by Maria Paviour of the report against the eco-socio-politico environment
- Summary of results and next steps
- Recommendations for the public sector in gaining more ROI from existing initiatives

Public Sector Directors and Heads of Service may receive a **copy of the full Board Level Report** from this study, please book a face to face meeting or **free board presentation or workshop** with **Maria Paviour** who will attend at your premises, or alternatively, arrange for a Skype or phone meeting.

Please contact us on hello@wellbeingwithcari.co.uk or to contact Maria's office directly please contact Lisa at la@mariapaviour.com

In your board presentation Maria will:

- bring the research data to life
- explain the neuroscience of wellbeing
- how this was utilised in creating the research report
- explain the science behind Cari

You'll be able to ask any questions you may have - from both an individual's experience of Cari and a senior leadership team perspective - about Cari's organisational impact .

Testimonial:
"The report made sense and was very useful, it was great to have a [data] breakdown, but Maria speaking about it really brought it to life. She came to an SMT meeting and it went down very well."

OD and Strategy Team Lead

Other interested parties may receive a more detailed report by arranging a brief, free (no obligation) phone conversation with **Maria Paviour** or one of her team. Please book a time to suit you via this Calendly link…

Speak to Maria and she will arrange for you to have a free, personal consultation with Cari too!

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