

Exploring differences in the use of technology to support health: a population survey in Wales

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Method

- Nationally representative household sample.
 - 24% declined to participate.
- 1,240 individuals (16+ years) living in Wales.

Analysis

- Associations between demographics & health status with use and perceptions: Chi2, Logistic regression.
- Adjusted proportion determined using generalised linear model.

Questionnaire

Demographics	<ul style="list-style-type: none">• Age, Sex, Deprivation, Education, Employment
Health status	<ul style="list-style-type: none">• Self-reported health• Mental health• Long term health condition• Smoking tobacco• Alcohol consumption• Physical activity
Access to technology	<ul style="list-style-type: none">• Type of mobile phone used• Access to the internet at home• Use of wearable technology
Use of technology to support health	<ul style="list-style-type: none">• Perform activities/tasks• Monitor health
Perceptions on the use of technology to support health	<ul style="list-style-type: none">• Beneficial or detrimental to health• Motivators to use technology to support health

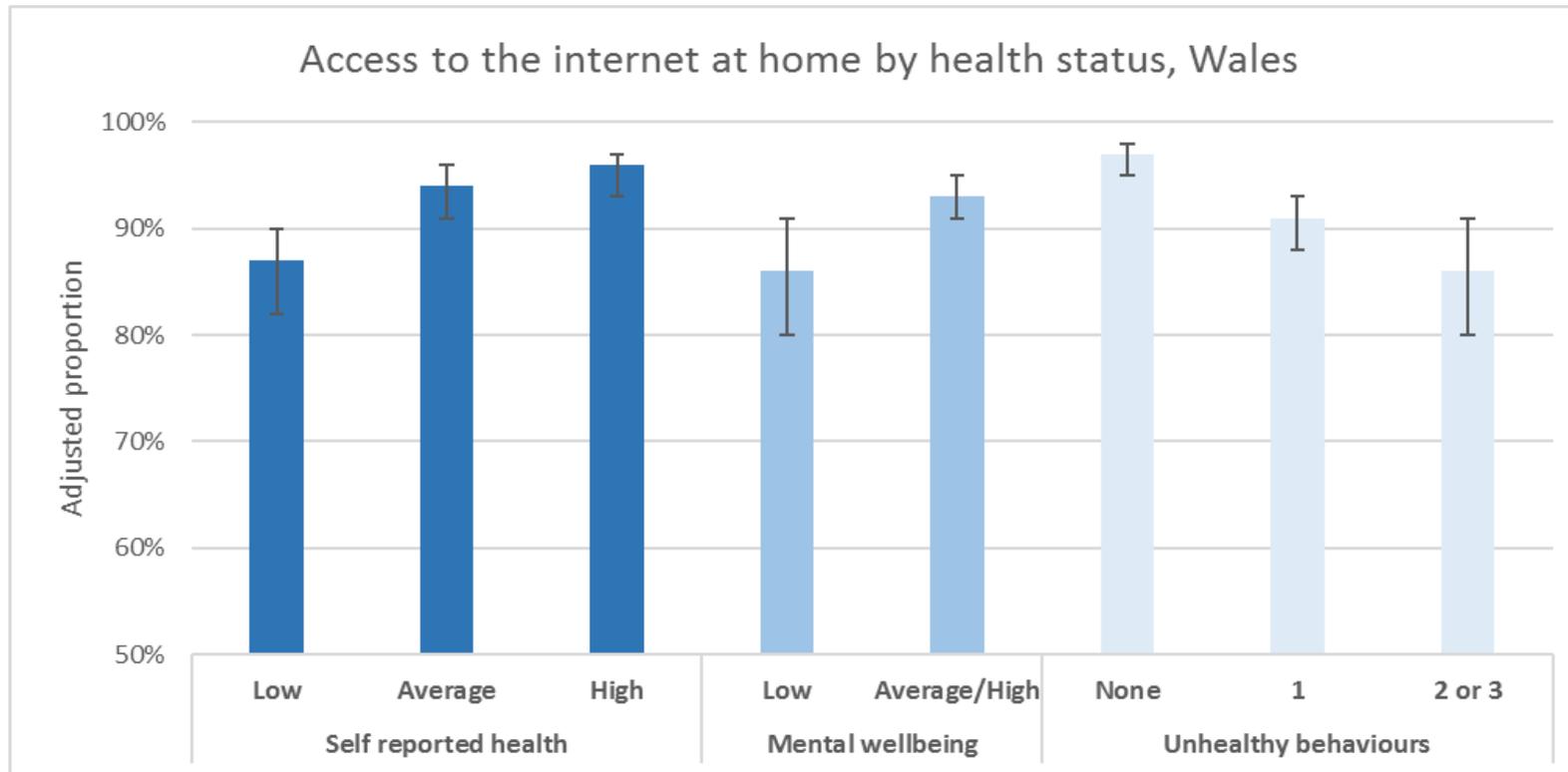
Are there inequalities in internet access in Wales?

13% of people in Wales have no internet connection at home



Significantly lower levels amongst

- Older groups
- More deprived
- Lower levels of education
- Economically inactive



Estimated marginal mean and 95 % confidence intervals adjusted for age, sex and deprivation.
Multivariate logistic regression $p < 0.001$

Using technology to support health

Amongst Tech users = 77% use technology to support their health



66%

General health information



62%

Health service information



50%

Activities



39%

Self diagnose



20%

Track personal goals



19%

Manage a long term condition



17%

Health appointment



11%

Emotional support



10%

Manage medication



9%

Manage other supplements

(Figures weighted to the population distribution of Wales)

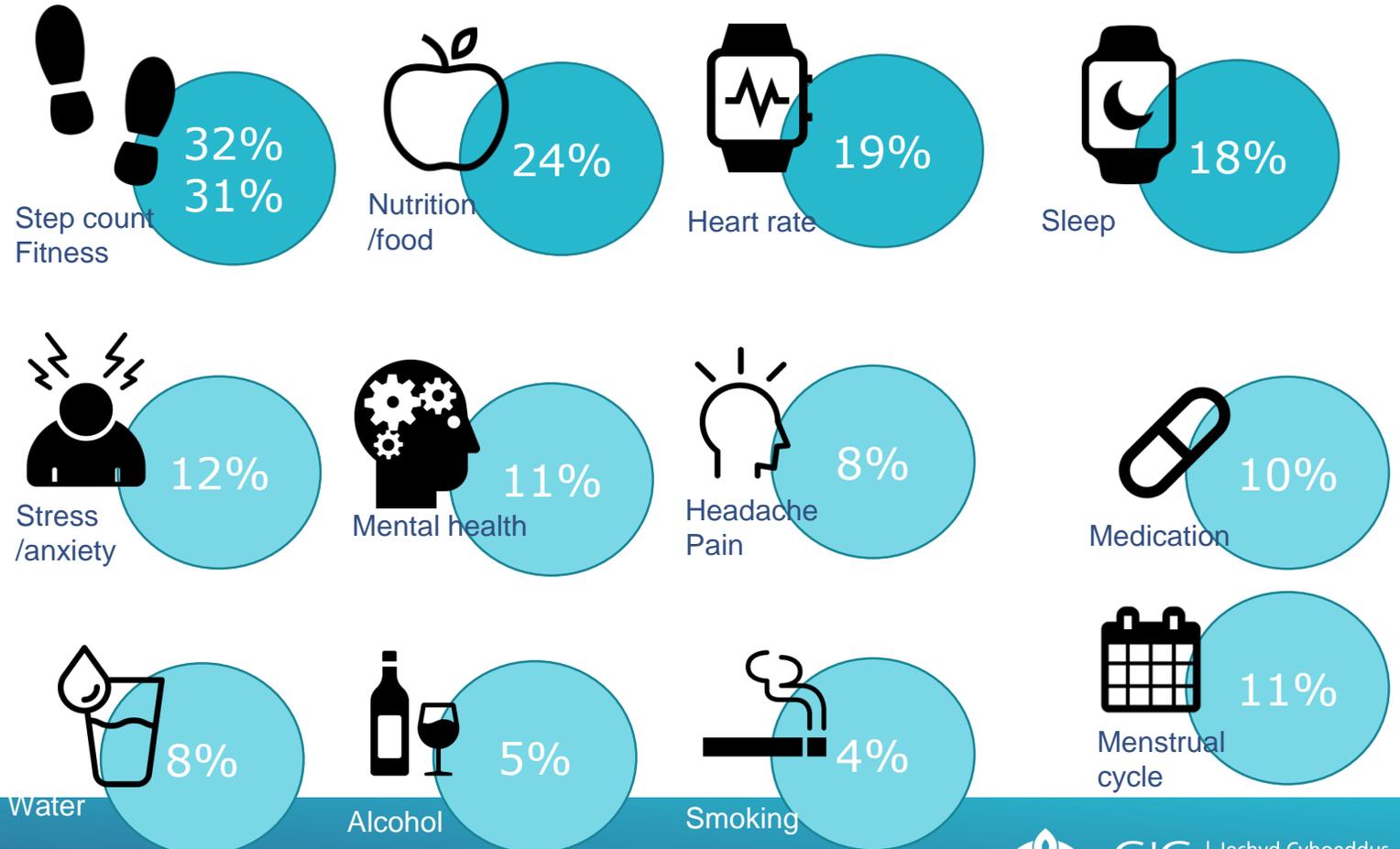


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Tracking health indicators

Amongst Tech users = 39% weekly track health



(Figures weighted to the population distribution of Wales)

Are there inequalities in using technology to support health?



Empowered “patient”

Low general health

- 60% finding information on general health
- **22% manage long term condition**
- **12% manage medications**

Emotional support

Low mental wellbeing

- 64% finding information on general health
- **13% finding emotional support online.**

Figures are estimated marginal means adjusted for age, sex and deprivation. Multivariate logistic regression $p < 0.05$

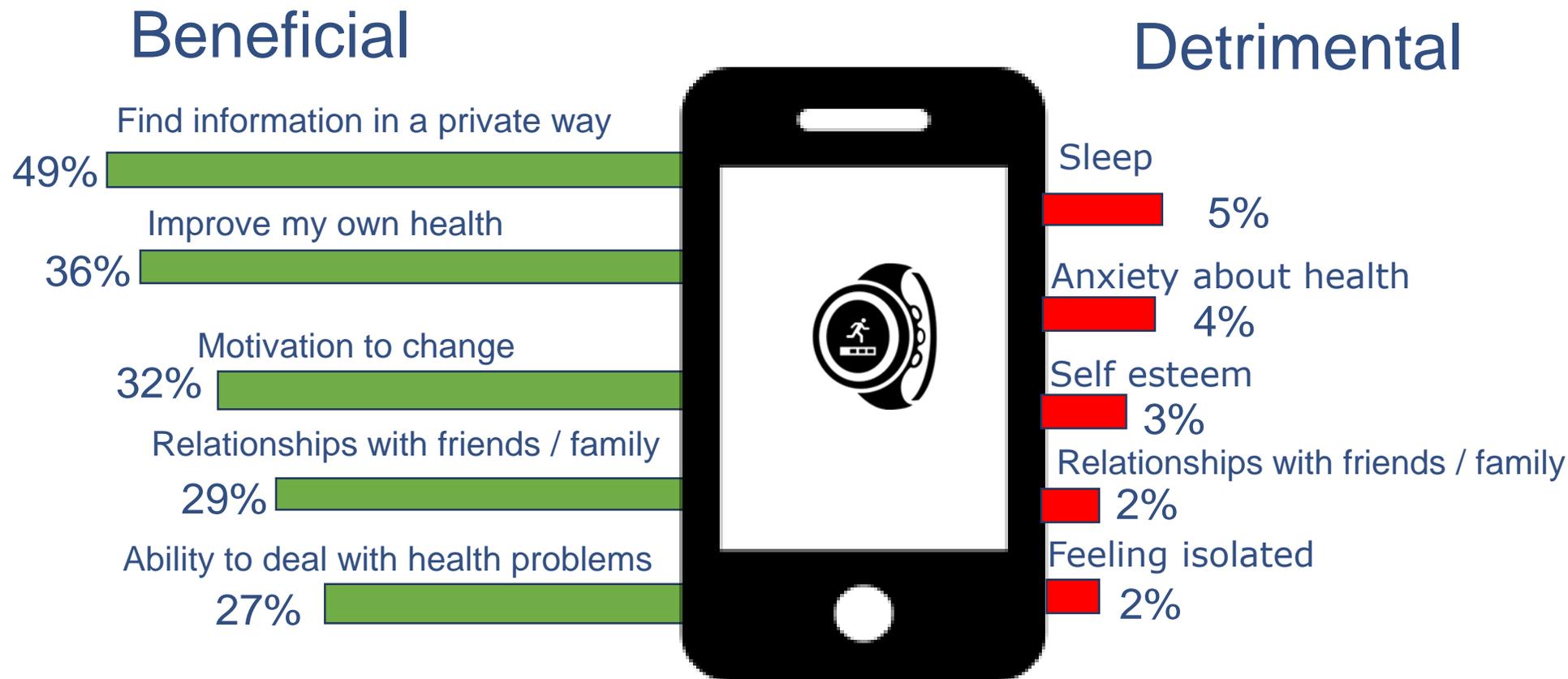


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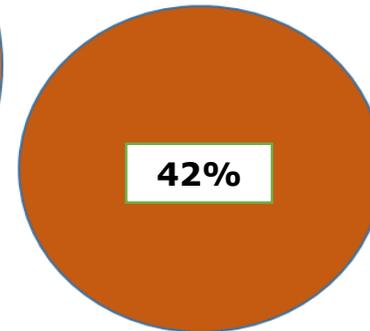
Does using technology make a difference?

For the majority, it made no difference.



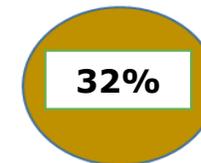
Proportion of people in Wales reporting the impact of using technology to support health across a range of activities

What would motivate people to use technology more to support their health?

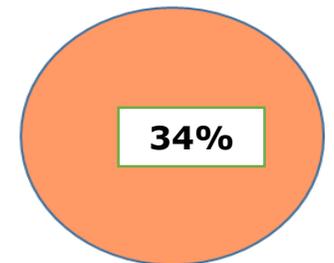


Better mobile phone Internet coverage

Available technology at a cheaper price

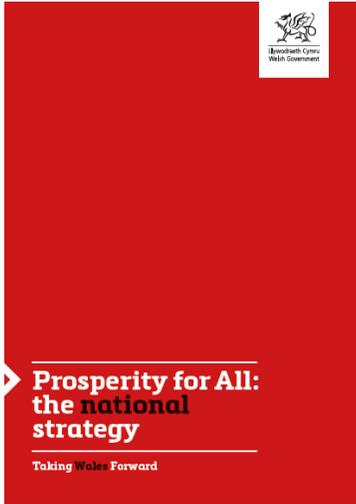


Faster internet connection at home



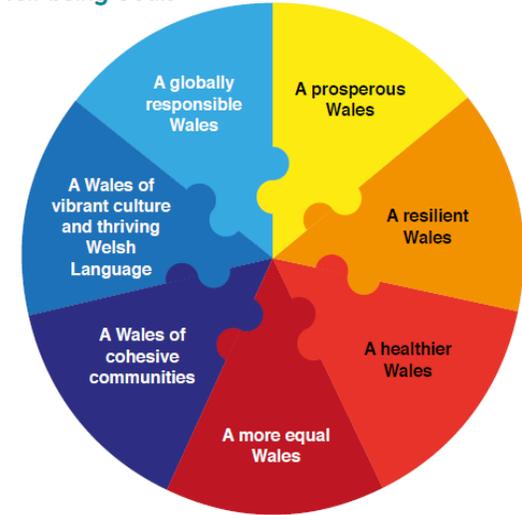
Understanding more about how to use the internet and technology to help me improve my health

Potential benefits to population health



*“...work with **NHS Wales** to provide people with **digital ways of accessing health and care services** and information, helping empower patients and carers to take greater control of their health and well being”.*

Well-being Goals



- **Ensure a digital divide (access, skills, trust) does not reinforce health inequalities.**
- **Address the evidence gap on effectiveness of technology and health – to empower.**

Thank you

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