

Narzędzia e-zdrowia w opiece zintegrowanej - dowody naukowe

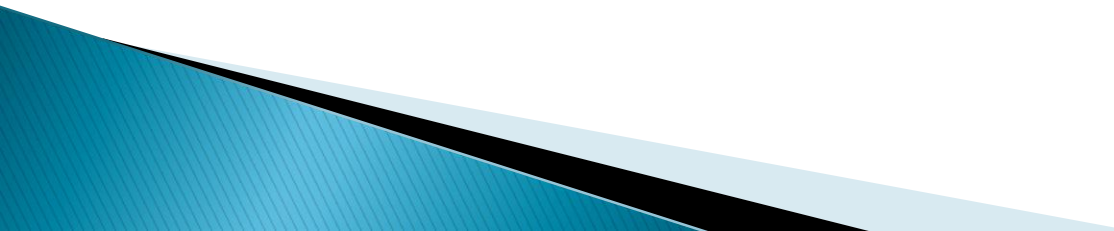
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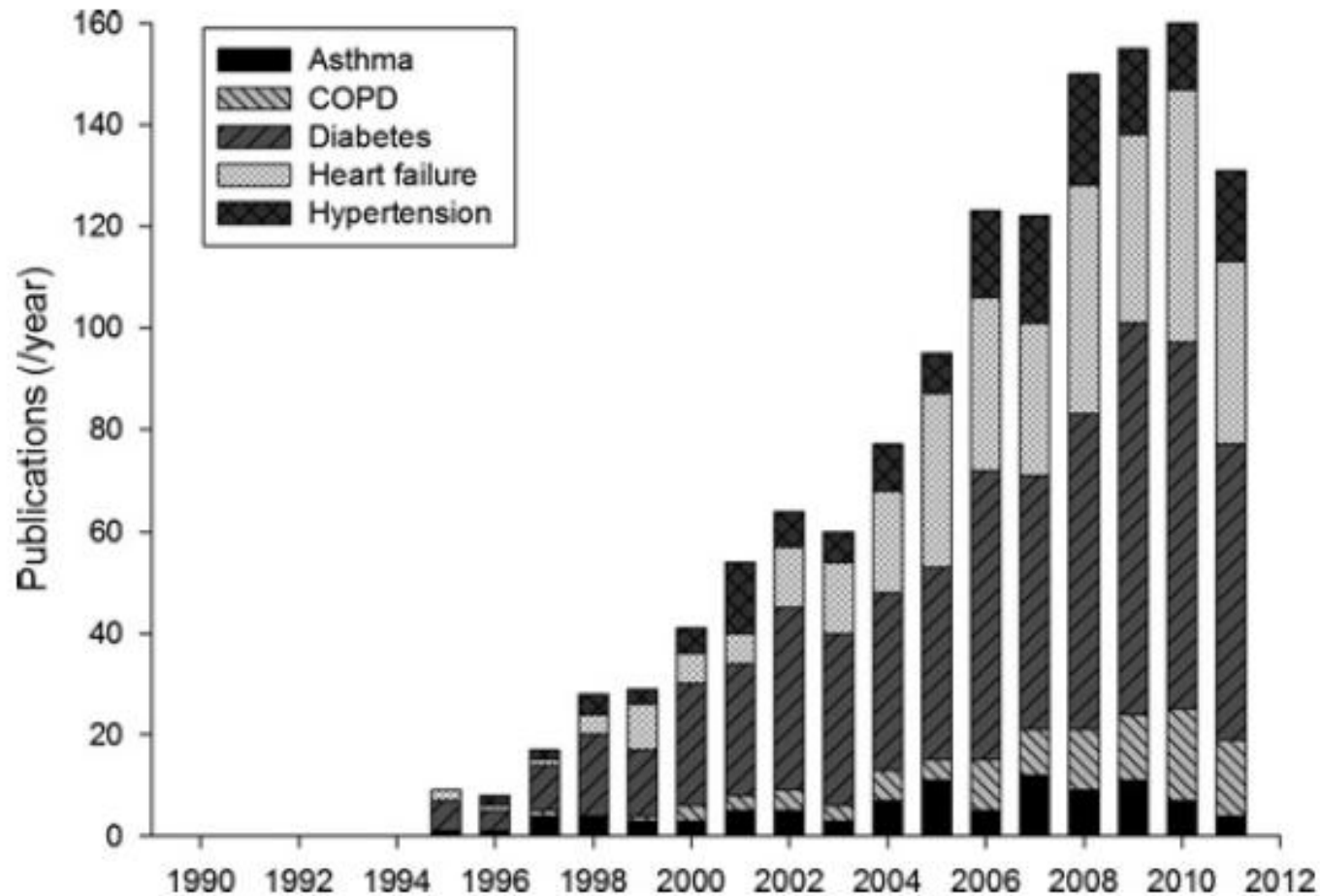
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Zakres zastosowań narzędzi e-zdrowia w opiece zintegrowanej

1. Edukacja zdrowotna (mająca na celu wsparcie samokontroli i samoopieki)
 2. Transmisja danych medycznych, wymiana informacji o stanie zdrowia (np. telemonitoring)
 3. Umożliwienie lub poprawa kontaktu z profesjonalistami medycznymi (np. konsultacje telefoniczne, coaching)
 4. Poprawa jakości danych medycznych (e-dokumentacja)
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Wzrost wiedzy na temat skuteczności rozwiązań e-zdrowia w chorobach przewlekłych



eHealth interventions for the prevention and treatment of overweight and obesity in adults: a systematic review with meta-analysis.

Hutchesson MJ¹, Rollo ME, Krukowski R, Ells L, Harvey J, Morqan PJ, Callister R, Plotnikoff R, Collins CE.

⊕ Author information

Abstract

A systematic review of randomized controlled trials was conducted to evaluate the effectiveness of eHealth interventions for the prevention and treatment of overweight and obesity in adults. Eight databases were searched for studies published in English from 1995 to 17 September 2014. Eighty-four studies were included, with 183 intervention arms, of which 76% (n = 139) included an eHealth component. Sixty-one studies had the primary aim of weight loss, 10 weight loss maintenance, eight weight gain prevention, and five weight loss and maintenance. eHealth interventions were predominantly delivered using the Internet, but also email, text messages, monitoring devices, mobile applications, computer programs, podcasts and personal digital assistants. Forty percent (n = 55) of interventions used more than one type of technology, and 43.2% (n = 60) were delivered solely using eHealth technologies. Meta-analyses demonstrated significantly greater weight loss (kg) in eHealth weight loss interventions compared with control (MD -2.70 [-3.33, -2.08], P < 0.001) or minimal interventions (MD -1.40 [-1.98, -0.82], P < 0.001), and in eHealth weight loss interventions with extra components or technologies (MD 1.46 [0.80, 2.13], P < 0.001) compared with standard eHealth programmes. The findings support the use of eHealth interventions as a treatment option for obesity, but there is insufficient evidence for the effectiveness of eHealth interventions for weight loss maintenance or weight gain prevention.

Does telemedicine improve treatment outcomes for diabetes? A meta-analysis of results from 55 randomized controlled trials.

Su D¹, Zhou J², Kelley MS³, Michaud TL¹, Siahpush M¹, Kim J¹, Wilson F¹, Stimpson JP⁴, Pagán JA⁵.

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Abstract

AIMS: To assess the overall effect of telemedicine on diabetes management and to identify features of telemedicine interventions that are associated with better diabetes management outcomes.

METHODS: Hedges's g was estimated as the summary measure of mean difference in HbA1c between patients with diabetes who went through telemedicine care and those who went through conventional, non-telemedicine care using a random-effects model. Q statistics were calculated to assess if the effect of telemedicine on diabetes management differs by types of diabetes, age groups of patients, duration of intervention, and primary telemedicine approaches used.

RESULTS: The analysis included 55 randomized controlled trials with a total of 9258 patients with diabetes, out of which 4607 were randomized to telemedicine groups and 4651 to conventional, non-telemedicine care groups. The results favored telemedicine over conventional care (Hedges's $g = -0.48$, $p < 0.001$) in diabetes management. The beneficial effect of telemedicine were more pronounced among patients with type 2 diabetes (Hedges's $g = -0.63$, $p < 0.001$) than among those with type 1 diabetes (Hedges's $g = -0.27$, $p = 0.027$) ($Q = 4.25$, $p = 0.04$).

CONCLUSIONS: Compared to conventional care, telemedicine is more effective in improving treatment outcomes for diabetes patients, especially for those with type 2 diabetes.

Comparative effectiveness of different forms of telemedicine for individuals with heart failure (HF): a systematic review and network meta-analysis.

Kotb A¹, Cameron C², Hsieh S¹, Wells G³.

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Abstract

BACKGROUND: Previous studies on telemedicine have either focused on its role in the management of chronic diseases in general or examined its effectiveness in comparison to standard post-discharge care. Little has been done to determine the comparative impact of different telemedicine options for a specific population such as individuals with heart failure (HF).

METHODS AND FINDINGS: Systematic reviews (SR) of randomized controlled trials (RCTs) that examined telephone support, telemonitoring, video monitoring or electrocardiographic monitoring for HF patients were identified using a comprehensive search of the following databases: MEDLINE, EMBASE, CINAHL and The Cochrane Library. Studies were included if they reported the primary outcome of mortality or any of the following secondary outcomes: all-cause hospitalization and heart failure hospitalization. Thirty RCTs (N = 10,193 patients) were included. Compared to usual care, structured telephone support was found to reduce the odds of mortality (Odds Ratio 0.80; 95% Credible Intervals 0.66 to 0.96) and hospitalizations due to heart failure (0.69; [0.56 to 0.85]). Telemonitoring was also found to reduce the odds of mortality (0.53; [0.36 to 0.80]) and reduce hospitalizations related to heart failure (0.64; [0.39 to 0.95]) compared to usual post-discharge care. Interventions that involved ECG monitoring also reduced the odds of hospitalization due to heart failure (0.71; [0.52 to 0.98]).

LIMITATIONS: Much of the evidence currently available has focused on the comparing either telephone support or telemonitoring with usual care. This has therefore limited our current understanding of how some of the less common forms of telemedicine compare to one another.

CONCLUSIONS: Compared to usual care, structured telephone support and telemonitoring significantly reduced the odds of deaths and hospitalization due to heart failure. Despite being the most widely studied forms of telemedicine, little has been done to directly compare these two interventions against one another. Further research into their comparative cost-effectiveness is also warranted.

Efekty interwencji w 150 badaniach obejmujących 37695 pacjentów

