

# **Die Zukunft ist da – Herausforderungen digitaler Gesundheitsdaten für die Versorgungsforschung**

PD Dr. med. Horst Christian Vollmar, MPH

Konstituierende Sitzung der AG Digital Health im DNVF

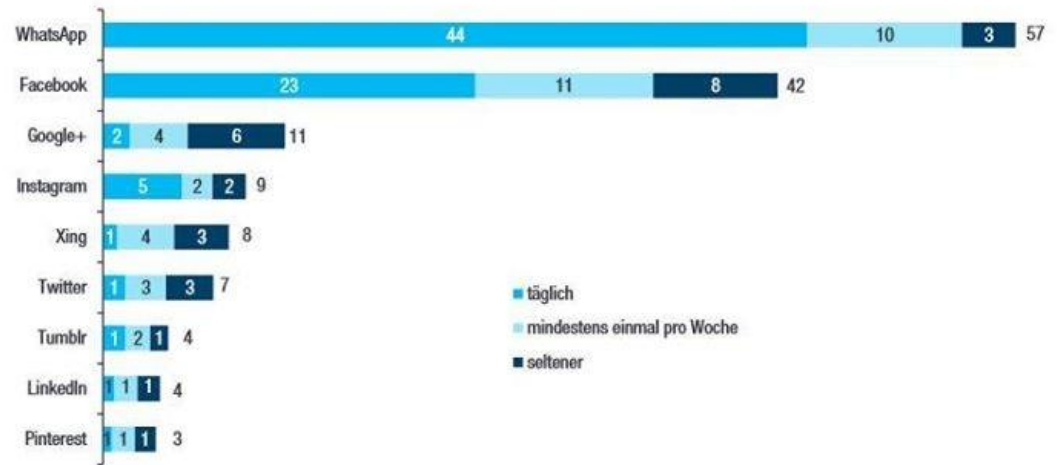
Berlin, 7.4.2016

# Zukunft verstehen, Zukunft gestalten

Deutschland 2030: Ergebnisse des zweiten Foresight-Zyklus



Abb. 1 Nutzung von Social-Media-Plattformen 2015  
in %



Basis: Deutschspr. Onlinenutzer ab 14 Jahren (n=1 432).

Quelle: ARD/ZDF-Onlinestudie 2015.



Sachverständigenrat  
für Verbraucherfragen

Digitale Welt und Gesundheit.

eHealth und mHealth –  
Chancen und Risiken der Digitalisierung  
im Gesundheitsbereich

Gerd Gigerenzer, Kirsten Schlegel-Matthies und Gert G. Wagner

- Rund 45 Millionen Deutsche besitzen ein Smartphone
- Fast 80% aller Haushalte nutzt das Internet
- Ca. 60% nutzen das Internet zu Gesundheitsfragen
- 20% der Surfer nutzen App-Anwendungen mit Wearables
- Jeder 3. Smartphone-Nutzer hat mindestens 1 App aus dem Gesundheits- oder Fitnessbereich installiert
- Jeder 3. würde diese Daten mit seiner Krankenkasse teilen

# mHealth: A Strategic Field without a Solid Scientific Soul. A Systematic Review of Pain-Related Apps



Rocio de la Vega, Jordi Miró\*

Unit for the Study and Treatment of Pain - ALGOS, Research Center for Behavior Assessment, Department of Psychology and Institut d'Investigació Sanitària Pere Virgili, Universitat Rovira i Virgili, Tarragona, Spain

## Abstract

**Background:** Mobile health (mHealth) has undergone exponential growth in recent years. Patients and healthcare professionals are increasingly using health-related applications, at the same time as concerns about ethical issues, bias, conflicts of interest and privacy are emerging. The general aim of this paper is to provide an overview of the current state of development of mHealth.

**Methods and Findings:** To exemplify the issues, we made a systematic review of the pain-related apps available in scientific databases (Medline, Web of Science, Gale, Psycinfo, etc.) and the main application shops (App Store, Blackberry App World, Google Play, Nokia Store and Windows Phone Store). Only applications (designed for both patients and clinicians) focused on pain education, assessment and treatment were included. Of the 47 papers published on 34 apps in scientific databases, none were available in the app shops. A total of 283 pain-related apps were found in the five shops searched, but no articles have been published on these apps. The main limitation of this review is that we did not look at all stores in all countries.

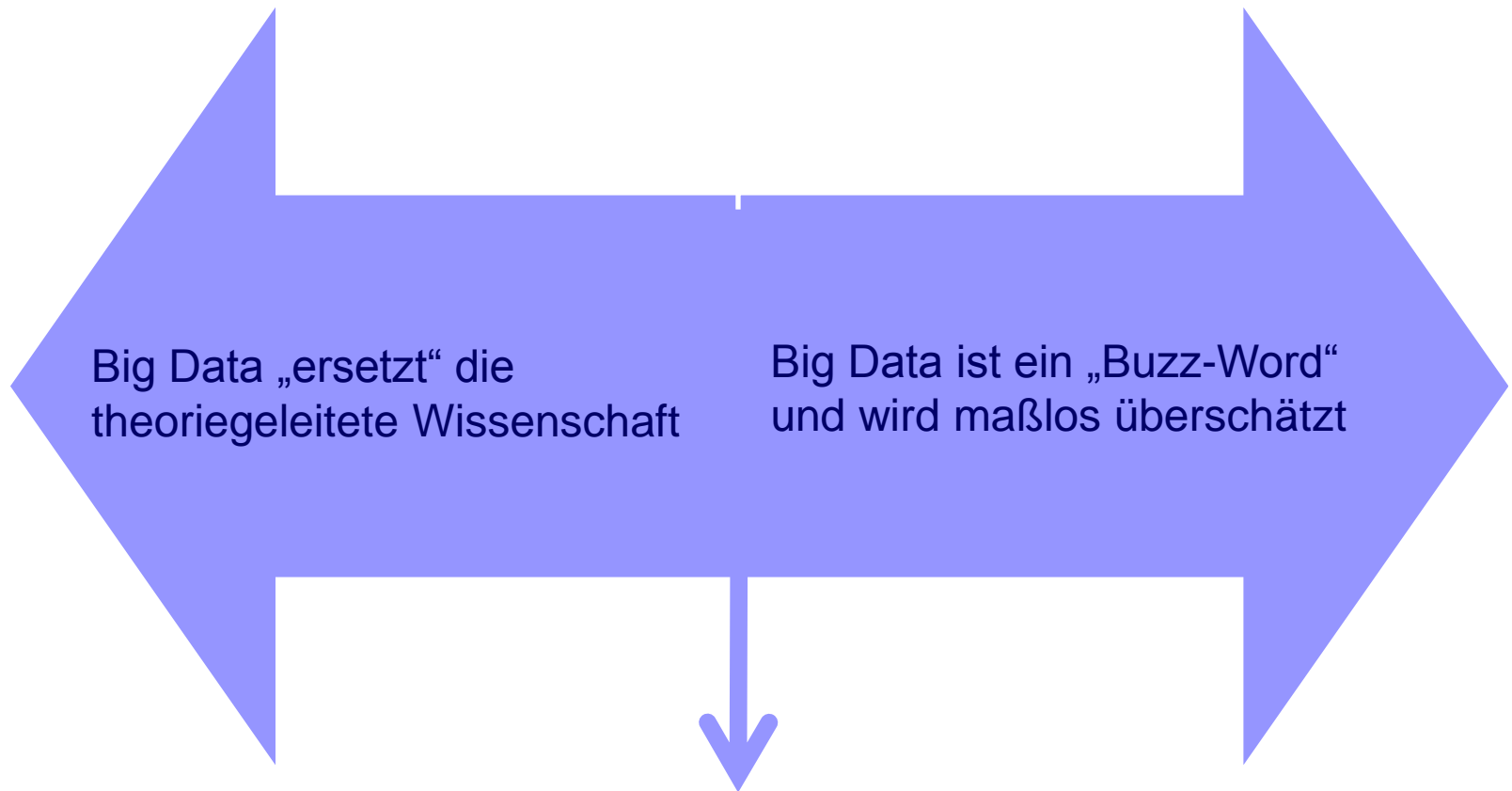
**Conclusions:** There is a huge gap between the scientific and commercial faces of mHealth. Specific efforts are needed to facilitate knowledge translation and regulate commercial health-related apps.

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# Big Data „Kontinuum“



# Two Ways of Knowing: Big Data and Evidence-Based Medicine

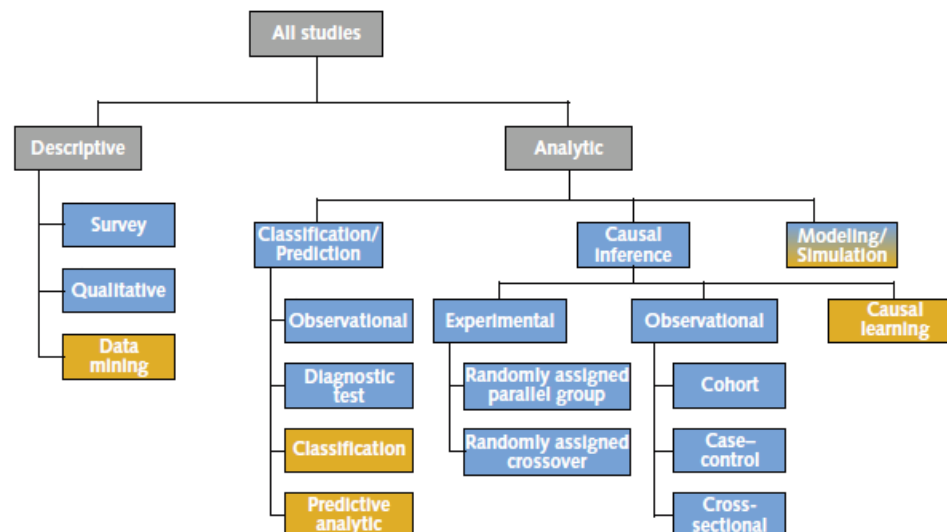
Ida Sim, MD, PhD

**E**vidence-based medicine (EBM) is more than 20 years old (1). Although EBM's painstaking path of careful clinical studies, critical appraisal of published evidence, and methodologically rigorous systematic reviews has been the template for knowing what works in

## EVIDENCE IS THE BASIS FOR A CLAIM OF KNOWLEDGE

Evidence-based medicine and big data represent 2 very different approaches to producing evidence. In

Appendix Figure. Taxonomy of traditional and big data study types.



Clinical studies include descriptive studies, which aim to describe a state of affairs, and analytic studies, which aim to quantify a relationship. Blue boxes represent traditional clinical study designs. Orange boxes represent examples of big data methods. Both traditional and big data methods are applicable to modeling and simulation. Adapted from reference 6.

# Wo soll die AG ihre Schwerpunkte setzen?

- Sammeln
- Clustern
- Priorisieren / Roadmap?
- Ggf. Untergruppen bilden
- Ziele? Methodenpapier(e)? Antragsinitiativen?

