DIGITALISATION TO ACHIEVE OUTCOME BASED MEDICINE AND Kata VALUE BASED HEALTHCARE

KATA – THE DIGITAL THERAPEUTICS

Suisse MedTech Day June 13th, 2023

Dr. Sabine Häussermann





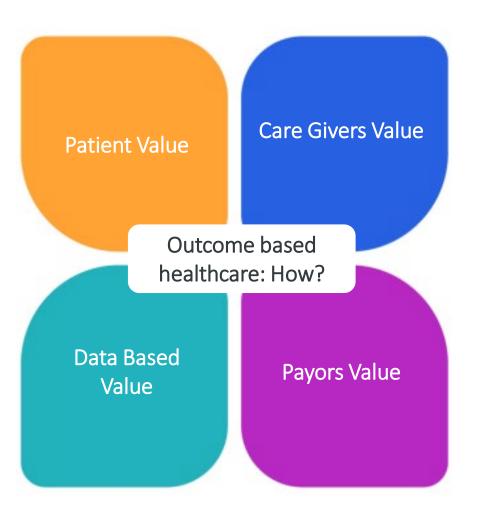
OUTCOME BASED HEALTHCARE: HOW?

Patient reported outcomes Collecting data on

- symptoms,
- quality of life and
- Encourage best practice

Collect data in every day life:

- Getting insights into patients behaviour
- Concise dash board



Exchange concise data With physicians and care givers

Identify unnecessary treatment

Encourage best practice

Enable best care

VISIONHEALTH

How to create a win-win situation for all stakeholders: insights into outcomes, shared & informed decisions, learn from the data and predict the future.

OUTCOME BASED HEALTHCARE: WHY?

Best possible patient care Empowers patients to take care into their own hands and connects them closer to

Create data to enable:

physicians

- Best possible therapy
- Assessment of forecasting



Support of medical care givers Conversations to the point at appointments and more personalised treatment.

Cut costs for payors More cost effective treatment with better outcome.



The chance to provide effective healthcare really needed by the patient at efficient cost.

Digital Health as Enabler of Outcome Based Medicine: Example Kata by VisionHealth



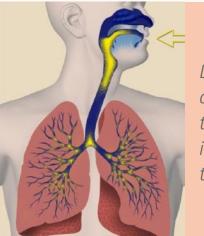
MEDICAL NEED: INSUFFICENT DOSE REACHING THE LUNGS

The challenge associated with inhalation therapy is accuracy and replication of the administered drug dose, which requires correct use of the inhaler in combination with the right handling and breathing manoeuvre.

- up to 90% of patients do not perform their prescribed inhalation therapy correctly.^{1,2,3}
- > The related underdosing leads to poor treatment outcome (incl. acute asthma attacks, hospitalization)^{4, 5, 6}
- Over 160 billion USD in additional direct and indirect cost worldwide every year.³

Why underdosing of inhaled drugs is a high unmet medical need:

- > Too many different inhalers confuse patients and physicians
- > 50% of patients never receive any training for their inhaler ^{7, 8, 9}



Low drug deposition in the lung due to improvable technique

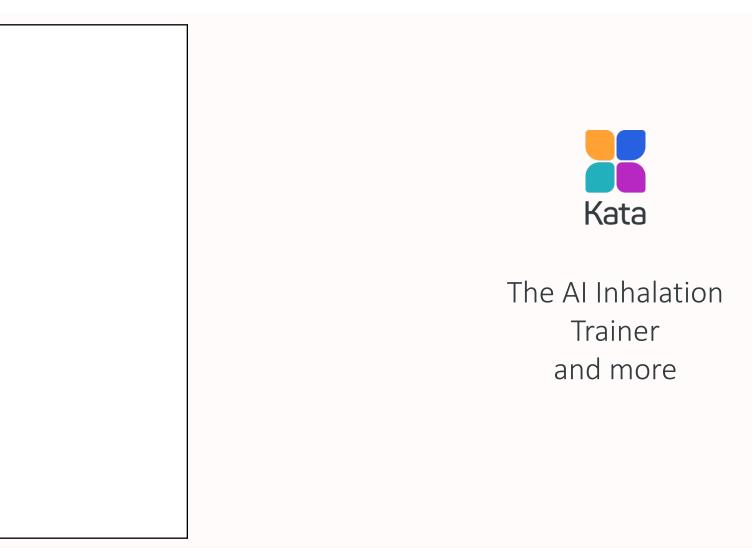


High drug deposition in the lung thanks to correct technique



Inhalation errors lower therapy outcome & increase cost.

SOLUTION: KATA – FIRST IN CLASS DIGITAL THERAPEUTICS





VisionHealth's proprietary platform technology enables real life training on patient's smartphone. Kata manages appropriate drug dosing for asthma & COPD patients.

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VisionHealth Business Models



TWO COMPLEMENTING VALUE BASED BUSINESS MODELS

Reimbursement

Reimbursement in Germany, Belgium & France need:

- Demonstration of clinical or structural benefit of digital application
- CE marked class I or IIa & certified according to ISO 27001, GDPR conform

Application to be made in each country individually,

Prices are negotiated separately in each country

Disease management programs

Pharmaceutical industry or structured treatment plans in countries are aiming to help people better manage their chronic disease and to maintain and improve QoL.

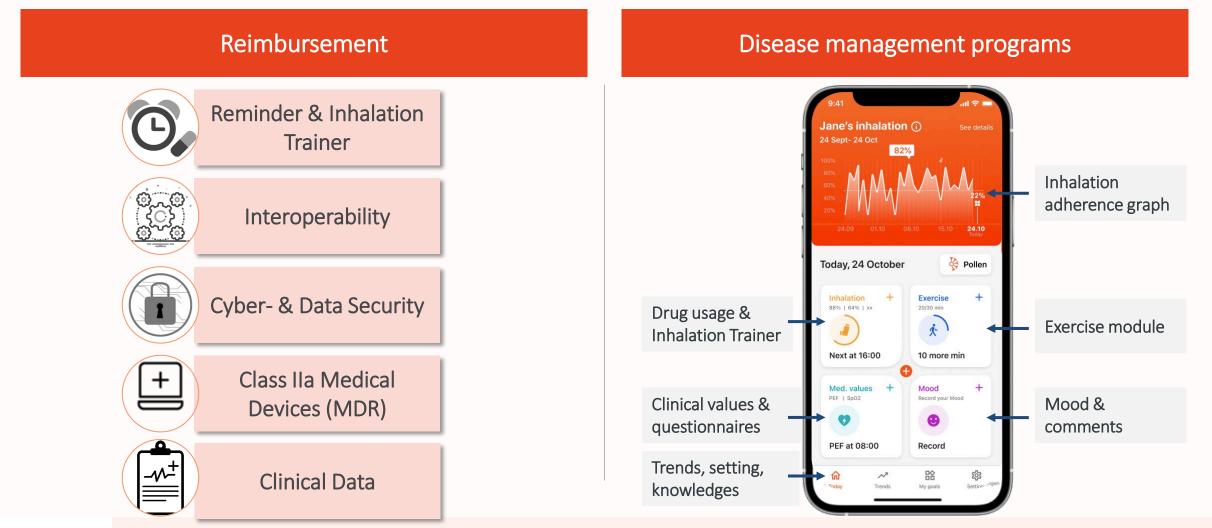
Possible ways of payment

- > Pharmaceutical Companies
 - > Accompany life saving treatment with DMP
- > Public healthcare funded DMP
 - > Physicians & organizations receive payment for DMP
- > Shared cost saving approach
 - Payors or accountable care organizations collaborate with industry to care for patients and share cost saving



Two opportunities to generate revenues with digital health.

WHAT IS NEEDED: EXAMPLE KATA





Very different requirements for the two business models.

WHATS THE PROCESS: EXAMPLE VISIONHEALTH

Reimbursement Germany

Reimbursement Kata App

- V Scientific Advice BfArM
- V Interoperability
- V Certified according to ISO 27001 & GDPR conform
- V CE marked class IIa
- Demonstration of clinical or structural benefit of digital application: Clinical Trial starting Q3/4 2023

Application to be submitted Q 2/3 2024 for fast-track listing at BfArM

Disease management programs

Our possible partners

- > Pharmaceutical Companies
 - Possible partners are orphan drug companies in the field of respiratory care: PAH and IPF

> Public healthcare funded DMP

- Invite by Bund deutscher Pneumologen to start first projects in German DMP with healthcare insurance
- > Shared cost saving approach
 - Starting to approach DMP companies as well as accountable care organizations



VisionHealths way forward: many opportunities

Fee for Outcome: Value Based Healthcare



ON THE WAY TO VALUE BASED HEALTHCARE

FEE FOR SERVICE

- Payment based on the number of services provided.
- > Overall higher costs
- Can lead to lower patient satisfaction if the treatment
- No rewards for the quality of healthcare provided.





Simple method for patients & doctors for billing.

Traditional structures are set that way.



Aim: Less cost for better health

Incentivises prevention New structures and digitalisation

needed.

VALUE BASED CARE

- Payment based on the quality of the care provided over quantity.
- > Can bring down the price of care for individual patients.
- Can improve patient satisfaction and health outcomes.
- > Rewards for quality of care.



The medical outcome and patients' satisfaction will play a more and more role in payment for healthcare.

Digital therapeutics will change the way we deliver healthcare to patients. Join us and be part of our journey!

VisionHealth GmbH Landsberger Strasse 72 80339 München Germany

Dr. Sabine Häussermann (CEO) Tel. +49 151 70186589

haeussermann@visionhealth.gmbh www.visionhealth.gmbh





Citations

UNMET MEDICAL NEED

1. Normansell R, Kew KM, Mathioudakis AG. Interventions to improve inhaler technique for people with asthma. *Cochrane Database Syst Rev.* 2017;3:Cd012286.

2. Fink JB, Rubin BK. Problems with inhaler use: a call for improved clinician and patient education. *Respir Care.* 2005;50(10):1360-1374; discussion 1374-1365.

3. Roggeri A, Micheletto C, Roggeri DP. Inhalation errors due to device switch in patients with chronic obstructive pulmonary disease and asthma: critical health and economic issues. *Int J Chron Obstruct Pulmon Dis.* 2016;11:597-602. Published 2016 Mar 21. doi:10.2147/COPD.S103335

4. Sulaiman I, Greene G, MacHale E, et al. A randomised clinical trial of feedback on inhaler adherence and technique in patients with severe uncontrolled asthma. Eur Respir J 2018; 51: 1701126 [https://doi.org/10.1183/13993003.01126-201]

5. O'Dwyer S, Greene G, MacHale E, Cushen B, Sulaiman I, Boland F, Bosnic-Anticevich S, Mokoka MC, Reilly RB, Taylor T, Ryder SA, Costello RW. Personalized Biofeedback on Inhaler Adherence and Technique by Community Pharmacists: A Cluster Randomized Clinical Trial. J Allergy Clin Immunol Pract. 2020 Feb;8(2):635-644. doi: 10.1016/j.jaip.2019.09.008. Epub 2019 Sep 27. PMID: 31568927.
6. Morton RW, Elphick HE, Rigby AS, Daw WJ, King DA, Smith LJ, Everard ML. STAAR: a randomised controlled trial of electronic adherence monitoring with reminder alarms and feedback to improve clinical outcomes for children with asthma. Thorax. 2017 Apr;72(4):347-354. doi: 10.1136/thoraxjnl-2015-208171. Epub 2016 Nov 4. PMID: 27815524.

7. Lavorini F1, Magnan A, Dubus JC, Voshaar T, Corbetta L, Broeders M, Dekhuijzen R, Sanchis J, Viejo JL, Barnes P, Corrigan C, Levy M, Crompton GK. (2008), Effect of incorrect use of dry powder inhalers on management of patients with asthma and COPD. <u>Respir Med.</u> 2008 Apr;102(4):593-604.

8. Yotaro Takaku*, Kazuyoshi Kurashima, Chie Ohta, Takashi Ishiguro, Naho Kagiyama, Tsutomu Yanagisawa, Noboru Takayanagi (2016) How many instructions are required to correct inhalation errors in patients with asthma and chronic obstructive pulmonary disease? Respiratory Medicine 123 (2017) 110e115

9. Inhaler Error Steering Committee1, Price D, Bosnic-Anticevich S, Briggs A, Chrystyn H, Rand C, Scheuch G, Bousquet J. (2013) nhaler competence in asthma: common errors, barriers to use and recommended solutions. <u>Respir Med.</u> 2013 Jan;107(1):37-46. doi: 10.1016/j.rmed.2012.09.017.

MARKET

10. WHO Asthma and COPD key facts 2019

11. Rehman A, Amin F, Sadeeqa S. Prevalence of asthma and its management: A review. J Pak Med Assoc. 2018 Dec;68(12):1823-1827. PMID: 30504949.

12. Mauer Y, Taliercio RM. Managing adult asthma: The 2019 GINA guidelines. Cleve Clin J Med. 2020 Aug 31;87(9):569-575. doi: 10.3949/ccjm.87a.19136. PMID: 32868307.

13. Bednarek M, Maciejewski J, Wozniak M, Kuca P, Zielinski J. Prevalence, severity and underdiagnosis of COPD in the primary care setting. Thorax. 2008 May;63(5):402-7. doi: 10.1136/thx.2007.085456. Epub 2008 Jan 30. PMID: 18234906.

14. Lutter JI, Jörres RA, Trudzinski FC, Alter P, Kellerer C, Watz H, Welte T, Bals R, Kauffmann-Guerrero D, Behr J, Holle R, F Vogelmeier C, Kahnert K; COSYCONET study group. Treatment of COPD Groups GOLD A and B with Inhaled Corticosteroids in the COSYCONET Cohort - Determinants and Consequences. Int J Chron Obstruct Pulmon Dis. 2021 Apr 14;16:987-998. doi: 10.2147/COPD.S304532. PMID: 33883892; PMCID: PMC8053704.

15. Modley B, Kata[®] Value Summary: Asthma. 15.02.2020 not published

16. Modley B, Kata® Value Summary: COPD 19.08.2020 not published

