

BBeović

# **KAKO IZBOLJŠATI PREDPISOVANJE PROTIMIKROBNIH ZDRAVIL V AMBULANTI**

# Ali imate vtis

(interaktivno vprašanje)

1. Posebno veliko časa mi vzame prepričevanje bolnika, da antibiotikov ne potrebuje
2. Bolniki so danes kar dobro izobraženi, ne zahtevajo antibiotikov po nepotrebem

# **Ali imate vtis**

(interaktivno vprašanje)

- 1. Predpisovanje antibiotikov v ambulanti ni poseben problem**
- 2. Ukrepi, ki bi mi pomagali zmanjšati predpisovanje, bi bili dobrodošli**

# Pregled učinkovitih ukrepov nadzorovane rabe antibiotikov na primarni ravni



Glasziu P, et al. AJGP Vol. 51, No. 1–2, Jan–Feb 2022

Regulatorne strategije

Politike

Klinične strategije

**Regulatorne strategije:  
nekaj primerov**

Omejevanje ponovnih  
predpisov antibiotikov

Ustrezna velikost  
zavoječkov antibiotikov

Dostop do smernic

and treatment duration

### Policy strategies

Strategy	Description	Effectiveness (reduction in antibiotics)	Uptake/reach <sup>29,30</sup>	Comments
Audit and feedback letter	CMO letter to highest 30% of GP prescribers <sup>21</sup>	8.4–9.4% reduction over 12 months	30% (high prescribers)	
Academic detailing	NPS MedicineWise runs visiting programs (last in 2012–13) as part of a multifaceted program including PBS feedback reports <sup>20</sup>	18.4% reduction over five years for all GP prescribers for all interventions including academic detailing	>9000 GPs received visit	All GPs received PBS feedback report
Media campaigns	NPS MedicineWise has previously run intermittent media campaigns for consumers integrated with prescriber activities <sup>31</sup>	Unclear impact on antibiotic use	National	Integrated nationwide prescriber and consumer program associated with modest but consistent positive changes in consumer awareness, beliefs, attitudes and behaviour to the appropriate use of antibiotics for upper respiratory tract infections

**Table 1. Policy and clinical strategies, and their potential for reduced antibiotic usage (Cont'd)****Clinical strategies**

<b>Strategy</b>	<b>Description</b>	<b>Effectiveness (reduction in antibiotics)</b>	<b>Uptake/reach<sup>29,30</sup></b>	<b>Comments</b>
Delayed prescribing	Antibiotic script given as 'wait and see' <sup>26</sup>	64% reduction	72% always/often 20% occasionally	Reduction depends on mode of 'delay'
Patient information sheets	Handouts on symptom self-management and red flags <sup>32</sup>	47%	20% always/often 27% occasionally	For viral upper respiratory tract infection and bronchitis
Shared decision making	Decision aid showing benefits and harms of antibiotics <sup>22</sup>	39%	N/A	For otitis media, sore throat
Clinical prediction rules	feverPAIN rule predicting strep <sup>25</sup>	29%	N/A	For sore throat only
Near-patient testing	C-reactive protein, procalcitonin and strep test kit <sup>29</sup>	21-61%	18% for pharyngitis or 'flu	Cost of tests not covered by MBS
'NUDGE' poster in practice	Practice display of poster signed by GPs <sup>33</sup>	19% reduction in inappropriate antibiotics	Uncommon	Only one trial done (in USA)
Voluntary audit and feedback	Prescribing data compared to others		10% have done some time and received feedback	Note: lower than CMO letter and NPS MedicineWise reach
Computer decision support	Automated into GP electronic medical software <sup>34</sup>	Variable Choice and duration of antibiotics improved	Uncommon	Under active investigation; 88% of GPs wanted better integration <sup>30</sup>

*CMO, Chief Medical Officer; GP, general practitioner; MBS, Medicare Benefits Schedule; N/A, not available; PBS, Pharmaceutical Benefits Scheme*



## Expert Review of Anti-infective Therapy

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# How can we improve antibiotic prescribing in primary care?

Oliver J. Dyar, Bojana Beovic, Vera Vlahovic-Palcevski, Theo Verheij & Céline Pulcini

# Pristopi k izboljševanju predpisovanja



Kampanje za laike in predpisovalce: Belgija, Francija

Regionalni pristop (Švedska, Francija)

Več pristopov hkrati (multifaceted)

Vsak ukrep naj upošteva izsledke raziskav o spreminjanju vedenja (rezultati Cochranovega pregleda učinkovitosti intervencij)

## Izobraževanje

Behaviour change and antibiotic prescribing in healthcare settings.

2015. Available at:

[http://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/405031/Behaviour\\_Change\\_for\\_Antibiotic\\_Prescribing\\_-\\_FINAL.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/405031/Behaviour_Change_for_Antibiotic_Prescribing_-_FINAL.pdf) [Last accessed 23 December 2015]

Hulscher Lancet Infect Dis 2010; 10:

167-175, Butler CC BMJ 2012; 344:

d8173, Bekkers MJ Little P, Lancet

2013; 382: 1175-1182 Tonkin-Crine S,

Prim Care Respir Med 2014; 24: 14026

Yardley L, Sci 2013; 8: 134

**Izobraževanje ima vpliv, ki je majhen, a nezanemarljiv**

**Uspešne tehnike:**

**- Interaktivno internetno izobraževanje**

**- Trening v majhnih skupinah**

**- Učenje na primerih s povratno informacijo**

**- Prikaz znanstvenih dokazov**

**- Učenje komunikacije**

## Smernice

Nacionalne: slab vpliv

Večji vpliv regionalnih ali lokalnih smernic

Dober učinek elektronskega predpisovanja s pomočjo ekspertnega sistema (Clinical decision support tools and systems (CDSS) )



# Odloženo predpisovanje

Interventions and packages	DALYs gained per year (per 100 000 population)	Health expenditure saved per year (per capita USD PPP)	Additional full-time workers per year (in thousands of workers), total	Return on investment (USD PPP)
Enhance farm biosecurity	897	0.001	1 414	1.0
Improve PVV23 coverage	2 927	0.033	1 316	2.4
Enhance food handling practices	3 096	0.004	4 427	5.2
Financial incentives	33 264	0.617	15 255	0.5
Improve prescriber education and training	40 021	0.688	17 066	4.5
Mass media campaigns	42 598	0.771	19 321	2.8
Improve hand hygiene	78 153	1.054	26 843	24.6
Enhance environmental hygiene	83 030	1.206	29 213	5.0
Scale up the use of RDTs	133 648	2.484	54 299	4.0
Delayed prescription	141 488	2.642	57 311	17.2
Strengthen antimicrobial stewardship	178 894	2.854	66 580	2.3
Community-based package	308 780	2.241	129 912	2.5
Mixed package	556 795	5.913	222 916	5.0
Hospital-based package	618 875	7.871	242 694	4.7

**Več raziskav, tudi sistematični pregled raziskav pri bolnikih z okužbami dihal**

**Manj jemanja antibiotikov**

**Manj ponovnih pregledov**

**Nič več zapletov**

**Del smernic v nekaterih državah (okužbe dihal, sečil, divertikulitis)**

**? Prelaganje odgovornosti na bolnika**

# Orodja za bolnike



**Posebni obrazci za predpis antibiotikov**

**Receptu podoben listek z navodili, ko bolniku ne bomo predpisali antibiotika**

**Zloženke za informiranje bolnikov**

„Zaveza“



Zdravniki podpišejo dokument, da bodo antibiotike predpisovali skrbno

Dokument visi v obliki postra v čakalnici

V uporabi v ZDA, UK, Franciji



# Selektivno poročanje občutljivosti

- Na mikrobiološkem izvidu je le rezultat za zdravilo izbire in alternativo, če je bolnik preobčutljiv: npr za pnevmokoke le za penicilin in makrolide
- V rabi predvsem v Franciji

# Kazalniki kakovosti

- **Različni predlogi**
- **ZZZS pripravlja kazalnike OECD (kakšen del vseh predpisov zdravil predstavljajo določeni antibiotiki), morda dogovor z Združenjem za družinsko medicino**
- **Problem in pomen javne objave podatkov!**

# Omejitve predpisovanja

- **V Sloveniji omejeni:**
  - ✓ amoksicilin s klavulansko kislino
  - ✓ fluorokinoloni
  - ✓ makrolid
  - ✓ peroralni cefalosporini 3. generacije
- **Omejitve so uspešne**
- **Po svetu malo razširjeno (še Nizozemska!)**

## Strukturne spremembe

**Ne brez recepta!**

**Omejitev števila podobnih zdravil**

**Predpisovanje točne količine antibiotika  
(št tablet)**

**Ločevanje lekarne in predpisovalca**

**Predpis ne sme biti plačan**

**Način plačevanja zdravnikov:  
plačevanje po storitvi vs glavarina**

## **Strukturna spremembe**

**Plačevanje po kakovosti (pay for performance)**

**Urejanje bolniške odsotnosti (število kontaktov z zdravnikom poveča možnost predpisa antibiotika)**

**Stik s farmacevtsko industrijo**

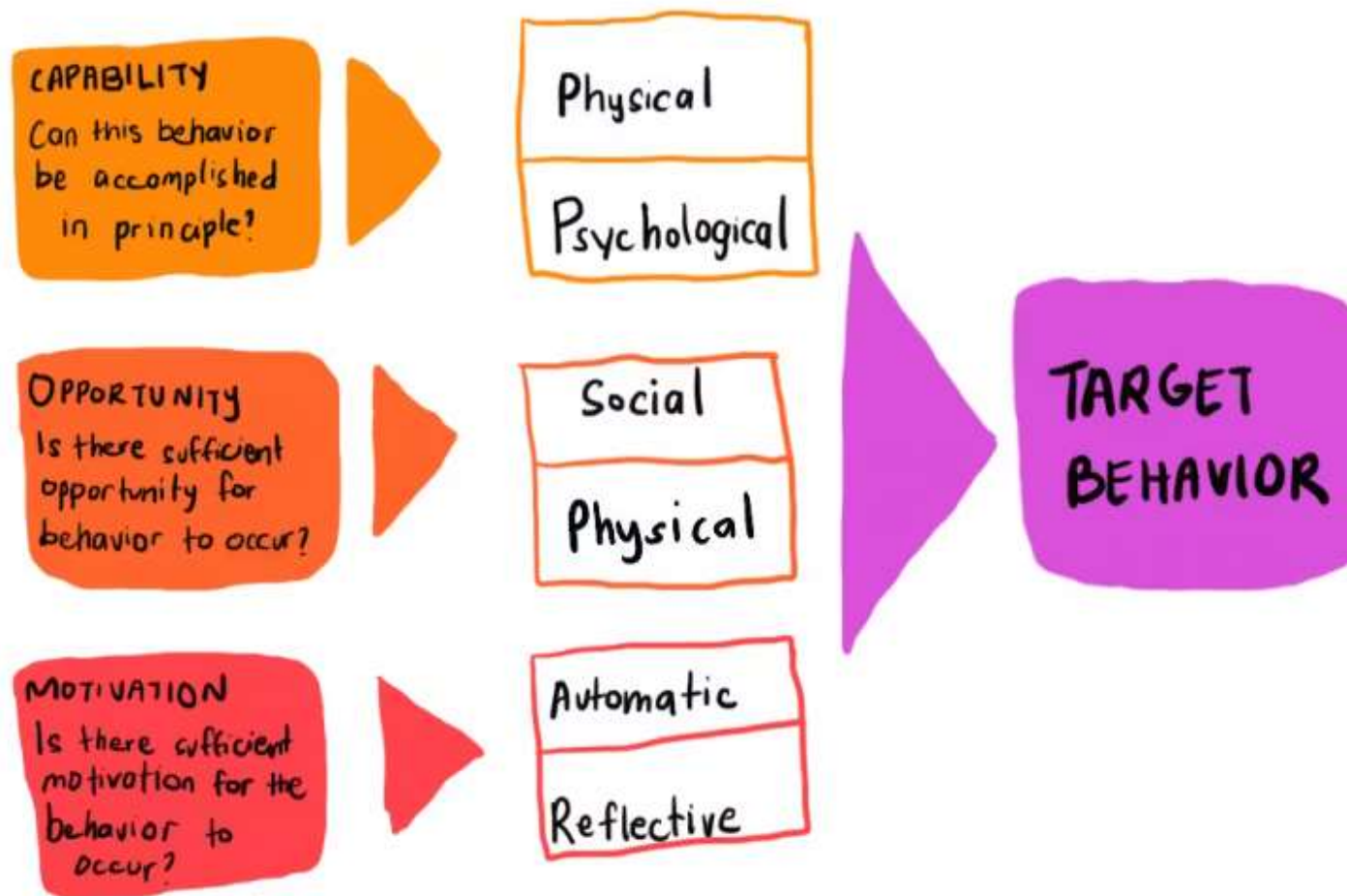
**Vloga farmacevtov in medicinske sestre (edukacija)**

# Problemi, ki omejujejo odgovorno rabo antibiotikov na primarni ravni

- „nisem jaz“
- Nimam podatkov, nimam podpore
- Odmaknjenost smernic
- Predpisovanje pod pritiskom

Amin AN, et al. Front. Med. 2022; 9:901980.

# Modeli za vedenjske spremembe



<https://thedecisionlab.com/reference-guide/organizational-behavior/the-com-b-model-for-behavior-change>

# Kaj bi izbrali?

(interaktivno vprašanje)

- 1. Restrikcije predpisovanja**
- 2. Receptom podobne listke za navodila bolniku, ki ne potrebuje antibiotika**
- 3. Selektivno poročanje antibiograma**
- 4. Zavezo**
- 5. Odloženo predpisovanje**